AMPROBE®

HARD AT WORK SINCE 1948.

2015

2015 Product Catalog

Volume 1

AMPROBE®

HARD AT WORK SINCE 1948.

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No Hassle Warranty

No waiting. No shipping charges.

Amprobe is committed to delivering the highest quality test and measurement products and provides a 1 year warranty with most products. The length of the product warranty is stated in the user's manual that comes with each product, which can be downloaded from **www.Amprobe.com.**

To better serve you, in the unlikely event that an Amprobe product requires warranty service, Amprobe authorizes over-the-counter product exchange from any authorized Amprobe distributor within 30 days from the date of purchase for products with a list price up to $500. For products with a list price greater than $500 or for issues encountered after the first 30 days but within the warranty period, please contact the Amprobe Service Department at **1-877-AMPROBE** for warranty services.

Clamp Meters

The new AMP-200 and AM-300 series offer a complete range of measurement functions for modern electrical environments, motor testing and HVAC applications. All models feature True-RMS sensing, low pass filters and fast response processors for quick, error-free measurements. The new Amp-Tip function allows for precise measurement of current down to the tenth of an Amp, and a third input jack on the AMP-300 Series enables motor rotation and 3-phase sequence testing.

Clamp Meter Selection Guide

Choose the clamp meter that's right for your job, from basics to industrial.

MODEL:	AMP-210	AMP-220	AMP-310	AMP-320	AMP-330	ACD-50NAV	ACD-51NAV	ACDC-52NAV	ACDC-54NAV	AMP-25	ACD-20SW	ACD-23SW	ACD-10 PLUS	ACD-14 PLUS	ACD-14 TRMS-PLUS	ACDC-3400 IND	RS-1007 PRO	AC50A	LH41A	ACD-6 PRO
	PG 5	PG 5	PG 5	PG 5	PG 5	PG 6	PG 6	PG 6	PG 6	PG 7	PG 8	PG 8	PG 8	PG 8	PG 8	PG 9	PG 9	PG 10	PG 10	PG 10
	TRMS Clamp Meters		Motor Maitenance & HVAC Clamp Meters			Industrial, Power Quality Navigator™ Clamps				Specialty Clamp	Swivel™ Clamp Meters		Multimeter Clamps			Large Jaw Industrial	Analog	Leakage Clamps		Basic Clamp
Safety Rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V	CAT IV 600 V	CAT II 600 V	CAT III 300 V	CAT III 600 V
True-RMS	•	•	•	•	•	•	•	•	•	•		•			•	•				
AC Voltage (V)	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V		600 V	600 V	600 V	600 V	600 V	750 V	600 V	400 V		600 V
DC Voltage (V)	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V		600 V	600 V	600 V	600 V	600 V	1000 V				600 V
AC Current (A)	600 A	600 A	600 A	600 A	1000 A	600 A	600 A	600 A	1000 A	300 A	400 A	400 A	600 A	600 A	600 A	1000 A	1000 A	60 A	40 A	1000 A
DC Current (A)		600 A		600 A	1000 A			600 A	1000 A	300 A						1000 A			40 A	
Microamps			•	•	•		•							•	•					
Resistance	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•
Capacitance	•	•	•	•	•	•	•	•	•			•	•	•	•	•				
Frequency (Test Leads)	•	•	•	•	•	•	•	•	•				•	•	•	•				
Frequency (Jaw)	•	•	•	•	•	•	•	•	•				•			•				
Duty Cycle																•				
Relative Zero	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•		•	•	•
Temperature			•	•	•		•		•			•		•	•					
Diode Test	•	•	•	•	•	•	•	•	•		•		•	•	•	•				•
Continuity Beeper	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•
Non-Contact Voltage	•	•	•	•	•	•	•	•	•	•	•	•								
Power (W)						•	•	•	•											
Autoranging	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
Total Harmonic Distortion (THD)						•	•	•	•											
Phase Rotation Indication			•	•	•	•	•	•	•											
Motor Rotation Test			•	•	•															
Inrush Current		•	•	•	•	•	•	•	•	•										
Backlight	•	•	•	•	•	•	•	•	•	•						•				
Bar Graph						•	•	•	•									•		
Data Hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
Peak hold (Crest)					•	•	•	•	•							•		•		
Auto Power-Off	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
Work light (LED)					•	•	•	•	•											
MAX	•	•	•	•	•	•	•	•	•				•	•	•	•		•		
MIN	•	•	•	•	•	•	•	•	•							•		•		
Low Pass Filter	•	•	•	•	•	•	•	•	•	•										

AMP-200 and AMP-300 Series TRMS and Motor Maintenance Clamp Meters

The AMP-200 and -300 Series True-RMS Clamp Meters offer a complete range of measurement functions for modern electrical environments, motor testing and HVAC applications. All models feature True-RMS sensing, low pass filters and fast response processors for quick, error-free measurements. The new Amp-Tip function allows for precise measurement of current down to the tenth of an Amp, and a third input jack on the AMP-300 Series enables motor rotation and 3-phase sequence testing. These clamps are surprisingly versatile, designed to eliminate the need for multiple tools and provide all-in-one measurement capabilities.

- **True-RMS** for noisy environments
- **Motor testing capabilities** (AMP-300 Series)
- **HVAC features** (AMP-300 Series)
- **Capacitance measurement**
- **Amp-Tip function** for precise measurements on small wires
- **Low pass filter** for variable frequency drives
- **HVAC features**
- **Peak hold** (AMP-330)
- **Work light** (AMP-330)
- **Safety rated:**
  - **CAT III 600 V** (AMP-200 Series, AMP-310, AMP-320)
  - **CAT III 1000 V, CAT IV 600 V** (AMP-330)

	FEATURE	AMP-210	AMP-220	AMP-310	AMP-320	AMP-330	BEST ACCURACY
Electrical	AC Current	0 to 600.0 A				0 to 1000 A	±1.8% + 5LSD (50 to 100 Hz) **AMP-330:** ±1.8% + 5LSD (40 to 100 Hz)
	DC Current	–	0 to 600.0 A	–	0 to 600.0 A	0 to 1000 A	±2.0% + 5LSD **AMP-330:** ±1.8% + 5LSD
	AC Voltage	0 to 600.0 V				0 to 1000.0 V	±1.0% + 5LSD (50 to 60 Hz) **AMP-330:** ±0.8% + 5LSD (50 to 60 Hz)
	DC Voltage	0 to 600.0 V				0 to 1000.0 V	±1.0% + 5LSD **AMP-330:** ±0.8% + 5LSD
	Resistance	0.0 kΩ to 60.00 kΩ					±1.0% + 5LSD
	Frequency	5.00 Hz to 999.9 Hz					±1.0% + 5LSD (600 V range) ±1.0% + 5LSD (600 A range) **AMP-330:** ±1.0% + 5LSD (1000 V range) ±1.0% + 5LSD (1000 A range)
	Amp-Tip Function (precise low current)	•	•	•	•	•	
	Accommodates Conductors	1.18" (30mm)	1.37" (35mm)	1.18" (30mm)	1.37" (35mm)	2.0" (51mm)	
HVAC	Capacitance	0.0 µF to 2500 µF					±2.0% + 4LSD
	DCµA	–	–	0.0 to 2000 µA			±1.0% + 5LSD
	Temperature	–	–	-40.0 to 752°F, -40.0 to 400°C			-40.0 to 14.0°F (±1.0% +3.0°F), >14.0 to 99.9°F (±1.0% +1.5°F) 100 to 752°F (±1.0% +2°F), -40.0 to -10.0°C (±1.0% +1.5°C) >-10.0 to 99.9°C (±1.0% +0.8°C), 100 to 400°C (±1.0% + 1°C)
Motor	3-Phase and Motor Rotation Indication	–	–	•	•	•	
	Inrush Current	–	•	•	•	•	
	Peak Hold (Crest)	–	–	–	–	•	
	Low Pass Filter	•	•	•	•	•	

INCLUDED ACCESSORIES: Test leads, user manual, batteries (installed)
AMP-310, AMP-320, AMP-330 only: Alligator Clip Set, Banana plug
K-type Thermocouple

CAT II 600 V

DUAL RATED CAT IV 600 V CAT III 1000 V

AMP-330

Watch Video

AMP-330
Industrial Motor Maintenance Clamp Meter

AMP-320
AC/DC Electrical Motor Maintenance Clamp Meter

Recommended Accessories

TL35B
Test Leads
(AMP-210 and AMP-220 only)
(See Page 56)

TL-300
Test Leads
All AMP-200 and AMP-300 Series)
(not shown)

ELS2A
AC Line Splitter
(See Page 56)

Navigator™ CAT IV Power Quality Clamp Meters

These power quality clamp meters measure power and power factor, total harmonic distortion, individual harmonics, as well as AC/DC voltage, current, capacitance, inrush current analysis, and phase sequence. The low pass filter enables voltage and current measurement on variable frequency drives. The Navigator™ joy stick allows quick selection of the numerous measurement features on the large LCD display. Built for rugged industrial environments with CAT IV 600 V/CAT III 1000 V safety rating.

- **THD (total harmonic distortion) and individual harmonics 1-25**
- **Power (KW) and power factor (0-1) indicates electrical usage and system efficiency**
- **True-RMS provides accuracy and dependability**
- **Low-pass filter for variable frequency drives**
- **Inrush current measurement for motors**
- **Phase rotation indication**
- **MAX/MIN and smart data hold**
- **Peak hold**
- **Auto flashlight when clamping**
- **Large backlit display with analog bar graph**
- **Overmold body absorbs shock – drop-proof to 4 ft (1.2 m)**
- **Safety Rated CAT IV 600 V**

FEATURE	ACD-50NAV	ACD-51NAV	ACDC-52NAV	ACDC-54NAV	BEST ACCURACY
AC Current	100.00 A, 600.0 A			100.00 A, 1000.0 A	+/- (1.5% rdg + 5 LSD)
DC Current	–	–	100.00 A, 600.0 A	100.00 A, 1000.0 A	+/- (1.5% rdg + 5 LSD)
AC Voltage	100.00 V, 1000 V				+/- (1.0% rdg + 5 LSD)
DC Voltage	100.00 V, 1000 V				+/- (0.7% rdg + 2 LSD)
Resistance	1.0000 kΩ, 10.000 kΩ, 100.00 kΩ				+/- (1.0% rdg + 3 LSD)
Frequency	20.0 Hz to 10 kHz				+/- (0.5% rdg +3 LSD)
Capacitance	4.000 µF, 4000 µF				+/- (1.9% rdg + 8 LSD)
DCµA	–	1000.0 µA	–	–	+/- (1.7% rdg + 2 LSD)
Temperature	–	-50°F → 1832°F (-50°C → 1000°C)	–	-50°F → 1832°F (-50°C → 1000°C)	+/- (1% rdg + 1°C)
THD (Total Harmonics Distortion)	0.1% → 100.0%				+/- (3.0% rdg + 10 LSD)
Individual Harmonics	1 → 25				–
Power	10 kW → 600 kW			10 kW → 1000 kW	±(A, error×V, reading + V, error×A, reading)
Power Factor	-1.00 → 1.00				+/- 3 degrees
Accommodates Conductors	Up to 1.45" (37 mm) in diameter			Up to 1.60" (40 mm) in diameter	

INCLUDED ACCESSORIES: Test leads, user manual, batteries (installed), thermocouple (ACD-51NAV and ACDC-54NAV only)

Recommended Accessories

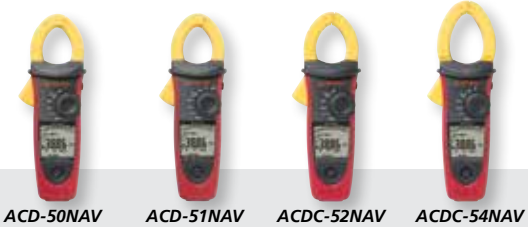
TL35B
Test Leads
(See Page 56)

ELS2A
AC Line Splitter
(See Page 56)

TOP RATED ★★★★★

"The ACDC-54NAV is my favorite meter for the job site *where AC/DC testing, verification, and troubleshooting are required. This meter is near perfect for the electrician/engineer that regularly works with residential or commercial HVAC, AC Hydraulics, or DC Telco.*

- ACDC-54NAV customer review



Navigate Through Any Job

Job Function	Applications	Model
Industrial Electricians	**Motor Testing.** Use inrush current to test motors capacitance to check start up capacitors and phase rotation to measure three-phase systems **Power Quality.** Quickly determine the efficiency of an electrical system by measuring power factor and working power measurements. Check for harmful harmonics while you perform daily system checks **Transformers.** The Navigator™ Clamp is the ideal tool for maintenance and installation of transformers and advanced equipment	**ACDC-52NAV** **ACDC-54NAV**
Facilities Maintenance	**System Monitoring.** Assess and monitor the condition of various systems and advanced equipment such as power quality analyzers **Performance Testing.** Verify system efficiency and quickly troubleshoot issues to minimize costly downtime by performing load studies, motor testing system checks	**ACD-50NAV**
HVAC Technicians	**System Monitoring.** Maintain large, complex HVAC systems in factories, data centers, hospitals and commercial buildings **Performance Testing.** Best tool for technicians who need the following critical measurements during HVAC system checks and repairs: • **Capacitance for checking startup capacitors** • **Micro Amps for the verification of the flame sensors** • **Temperature for checking cooling/heating performance** • **Inrush current for verification of the compressor motor** • **Low-pass filter to allow measurement of the variable frequency drives**	**ACD-51NAV**

AMP-25 AC/DC TRMS Mini-Clamp

Small size doesn't mean small features. The Amprobe AMP-25 Mini-Clamp is pocket-sized, enabling quick and easy spot checks of electrical systems. With its rugged construction and CAT III 600V rating, the AMP-25 is a must-have professional troubleshooting tool for commercial electricians and electrical contractors. The AMP-25 is designed to measure AC/DC load current and inrush current for motors. Essential features like True-RMS, non-contact voltage and low pass filter make this clamp stand tall next to clamps twice its size. With the AMP-25, you never have to sacrifice performance for size.

- **True-RMS for noisy environments provides accuracy and dependability**
- **AC & DC current to 300 A (10mA resolution)**
- **Low pass filter for variable frequency drives**
- **Inrush current for motor start-up monitoring**
- **Non-contact voltage detection (NCV)**
- **Jaw opening to 1 in (25 mm)**
- **Autoranging**
- **DCA zero and data hold**
- **Auto power off**
- **Large LCD backlit display**
- **Safety Rated CAT III 600 V**

FEATURE	AMP-25	BEST ACCURACY
AC Current	60.00 / 300.0 A	+/-(1.5% + 5 LSD) @ 50 to 100 Hz ≥ 3 A +/-(2.5% + 5 LSD) @ 100 to 400 Hz ≥ 3 A
DC Current	60.00 / 300.0 A	+/-(1.5% + 5 LSD) @ 300 A range
Low Pass Filter	•	
True-RMS	•	
Inrush Current	•	
Non-Contact Voltage	•	
Data Hold	•	

INCLUDED ACCESSORIES: Carrying case, two 1.5 V LR44 batteries installed and user manual

AMP-25
AC/DC TRMS
Mini-Clamp

Troubleshoot electrical systems and measure AC/DC load current on exposed wires in a breaker panel.

Utilize the inrush current function for motor start-up monitoring.

The non-contact voltage (NCV) function checks for voltage presence.

Pocket-sized for quick and easy spot checks of electrical systems.

Recommended Accessories

ELS2A
AC Line
Splitter
(See Page 56)

Clamp Meters

Swivel™ Clamp Meters ★★★★★ TOP RATED

Get fast and easy testing for HVAC and electrical applications. See measurements in tight or inconvenient spaces with the patented 180-degree rotating head design of Amprobe's Swivel™ Clamp Meters. The slim jaw puts all features within reach for one-handed operation.

- **180-degree rotating head**
- **VolTect™ non-contact voltage detection**
- **Audible continuity**
- **Auto ranging for quick checks**
- **Manual ranging for precise measurements**
- **Data hold**

ACD-23SW

FEATURE	ACD-20SW	ACD-23SW	BEST ACCURACY
True-RMS	–	•	–
AC Current	40.00 A , 400.0 A		+/- (2.0% rdg + 10 LSD) 50 Hz → 60 Hz
AC Voltage	4.000 V, 40.00 V, 400.0 V, 600.0 V		+/- (1.2% rdg + 8 LSD) → 50 Hz → 500 Hz at 4 V → 400 V ranges
DC Voltage	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600.0 V		+/- (0.5% rdg + 2 LSD)
Resistance	400.0 Ω, 4.000 kΩ, 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ		+/- (1.0% rdg + 4 LSD) at 400 Ω → 400 kΩ ranges
Capacitance	–	4.000 µF, 40.00 µF, 400.0 µF, 4,000 µF	+/- (3.0% rdg + 5 LSD) on 40 µF → 400 µF ranges
Temperature	–	-30°F → 400°F, (-35°C → 400°C)	+/- (1.0% + 2°F) 32°F → 400°F +/- (1.0% + 1°C) 0°C → 400°C
Diode Test	•	–	–
VolTect™ non-contact voltage detection	70 V → 600 VAC (50 Hz → 60 Hz)		–
Backlight	–	•	–
Accommodates Conductors	Up to 1.18" (30 mm) in diameter		

INCLUDED ACCESSORIES: Test leads, battery (installed), user manual, carrying case, K-type thermocouple (ACD-23SW only)

CAT III 600 V

Recommended Accessories

FOR: ACD-20SW, ACD-23SW, ACD-10 PLUS, ACD-14PLUS and ACD-14 TRMS-PLUS

TL35B
Test Leads
(See Page 56)

ELS2A
AC Line Splitter
(See Page 56)

ACD-10 PLUS Clamp Multimeter

with Uniquely Thin Jaws

With thinner jaws than standard clamp multimeters (only 0.4"/10 mm thick), the ACD-10 PLUS and ACD-14 PLUS allow access to tight measurement areas and still accommodate conductors up to 1"/25 mm.

ACD-14 PLUS and ACD-14 TRMS-PLUS

Dual Display Digital Clamp Multimeters

The professional's choice for both HVAC and electrical applications with a complete set of measurement features including dual displays that allow you to view amperage and voltage measurements simultaneously.

- **Continuity buzzer**
- **Hold and maximum reading functions**
- **Auto ranging**
- **Auto power off and low battery indication**
- **Rubber over-molded case**
- **Frequency is measured by either jaws or test leads (ACD-10 PLUS only)**
- **Microamps for testing flame sensors (ACD-14 PLUS only)**
- **Diode test (ACD-14 PLUS and ACD-14 TRMS-PLUS only)**
- **True-RMS for more accurate readings in noisy environments (ACD-14 TRMS-PLUS only)**

ACD-10 PLUS

ACD-14 TRMS-PLUS

FEATURES	ACD-10 PLUS	ACD-14 PLUS	ACD-14 TRMS-PLUS
True-RMS	–	–	•
AC Voltage	4.000 V, 40.00 V, 400.0 V, 600 V		
DC Voltage	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600 V		
AC Current	40.00 A, 400.0 A, 600 A		
Resistance	400.0 Ω, 4.000 kΩ, 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ		
Capacitance	500.0 nF, 5.000 µF, 50.00 µF, 500.0 µF, 3000 µF		
Frequency	40 Hz → 400 Hz with Jaw, 10 Hz → 100 kHz with test leads		
Temperature	–	-4°F → 999°F (-20°C → 537°C)	
Dual Displays	–	•	•
Micro Amps	–	•	•
Accommodates Conductors	up to 1.0" (25 mm) in diameter		

INCLUDED ACCESSORIES: Test leads, battery (installed), soft carrying pouch, K-type thermocouple with banana plug (ACD-14 PLUS and ACD-14 TRMS-PLUS only), user manual

CAT III 600 V

ACDC-3400 IND AC/DC CAT IV Industrial Clamp Meter

If an industrial or utility testing application demands a higher level of safety, reach for this CAT IV rated Clamp Meter.

- **Extra large jaws accommodate wide wires**
- **True-RMS for accuracy and dependability**
- **Peak hold**
- **Auto and manual ranging**
- **Auto power-off**
- **Data hold**
- **Backlight**
- **Diode test**
- **MAX/MIN recording**
- **Audible continuity**

FEATURE	ACDC-3400 IND
True-RMS	•
DC Voltage	660.0 mV, 6.600 V, 66.00 V, 660.0 V, 1000 V
AC Voltage	660.0 mV, 6.600 V, 66.00 V, 660.0 V, 750 V
AC Current	66.00 A, 660.0 A, 1000 A
DC Current	660.0 A, 1000 A
Resistance	660.0 Ω, 6.600 kΩ, 66.00 kΩ, 660.0 kΩ, 6.600 MΩ, 66.00 MΩ
Capacitance	6.600 nF, 66.00 nF, 660.0 nF, 6.600 µF, 66.00 µF, 660.0 µF, 6.6 mF
Frequency	66.00 Hz, 660.0 Hz, 6.600 kHz, 66.00 kHz, 660.0 kHz, 1.000 MHz
Continuity	•
Accommodates Conductors	Up to 2.0" (51 mm) in diameter

INCLUDED ACCESSORIES: Deluxe carrying case, test leads, test leads, battery (installed), user manual.

ACDC-3400 IND

★★★★★

TOP RATED

"Top quality product Fast, accurate and simple to use."

- ACDC-3400 IND customer review

Recommended Accessories

FOR: ACDC-3400 and RS-1007 PRO

TL35B
Test Leads
(See Page 56)

RS-1007 PRO CAT IV Analog Clamp Meter

Take these clamp meters to extremes. Digital clamp meters have LCD screens that tend to freeze below 32°F (0°C), but the Amprobe analog clamp meters can take extreme heat or cold and keep on measuring amps and volts without problems or batteries.

- **Easy-to-read rotary scale**
- **Works in temperatures from 5°F to 122°F**
- **Does not need batteries to measure volts or amps**
- **Operates on 50Hz and 60Hz frequencies**
- **Pointer lock - data hold**

FEATURE	RS-1007 PRO
AC Voltage	150 V, 300 V, 600 V
AC Current	15 A, 40 A, 100 A, 300 A, 1000 A
Resistance	1000 Ω
Continuity	•
Accommodates Conductors	up to 1.88" (47 mm) in diameter

INCLUDED ACCESSORIES: Test leads, battery (installed, for resistance measurement only), user manual, carrying case

RS-1007 PRO

AC50A

LH41A

AC50A Leakage Current Clamp Multimeter

Great for applications requiring measurement of leakage and fault currents, this clamp measures low AC current down to microamps.

- **Min/max control to see largest/smallest values in a series of measurements**
- **Relative value measurement to determine differentials**
- **Data hold to freeze measurement value on the display**
- **Digital display with analog bargraph**
- **Auto power-off to save battery life**
- **Minimum resolution 0.01 mA**

LH41A AC/DC Low Current Clamp Meter

This highly accurate leakage clamp takes precise low-current measurements with 1mA resolution up to 4A; 10mA resolution from 4A to 40A

- **Data hold**
- **Auto power-off**
- **Auto zero button to zero display for DC**
- **Excellent accuracy and resolution**

FEATURE	AC50A	LH41A
AC Voltage	400.0 V	–
AC Current	40.00 mA, 400.0 mA, 4.000 A, 40.00 A, 60.0 A	4.000 A, 40.00 A
DC Current	–	4.000 A, 40.00 A
Resistance	400 Ω	–
Continuity	•	–
Accommodates Conductors	up to 1.2" (30 mm) in diameter	up to 0.78" (20 mm) in diameter

INCLUDED ACCESSORIES: Batteries (installed), user manual, test leads (AC50A only), carrying case (AC50A only)

DUAL RATED Electrical Safety CAT III 300 V CAT II 600 V

Electrical Safety CAT III 300 V

ACD-6 PRO

ACD-6 PRO Digital Clamp Meter

This high-current clamp doubles as a multimeter for AC and DC voltage, resistance and continuity.

- **Auto and manual ranging**
- **Relative zero mode**
- **Auto power-off**
- **Data hold**
- **Diode test**
- **Audible continuity**

MEASUREMENTS	ACD-6 PRO	BEST ACCURACY
DC Voltage	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600 V	1.0% + 3 LSD
AC Voltage	600 V	2.0% + 5 LSD
AC Current	400.0 A, 1000 A	1.5% + 5 LSD
Resistance	400.0 Ω, 4.000 kΩ, 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ	1.0% + 4 LSD
Accommodates Conductors	up to 1.77" (45 mm) in diameter	–

INCLUDED ACCESSORIES: Carrying case, batteries (installed), user manual

Electrical Safety CAT III 600 V

Recommended Accessories

FOR: ACD-6

TL35B Test Leads (See Page 56)

ELS2A AC Line Splitter (See Page 56)

ELS2A

ELS2A AC Line Splitter

Measure the current on a 2-wire or 3-wire power cord up to 15 A without having to cut off the plug and separate the conductors, or open electrical boxes on 120 V lines. Use with any Amprobe clamp meter.

- **Two measurement loops, 1X and 10X for increased sensitivity**
- **Built-in voltage measurement jacks to check for voltage sags and surges**
- **Rated for 120 V, 15 Amps**

For ordering information see page 59. For detailed specifications go to ***www.Amprobe.com***

Digital Multimeters

With Amprobe's broad selection of digital multimeters, you can find the perfect match for any job. From industrial meters safety-rated for CAT IV electrical environments, to simple pocket-sized meters, you'll find a digital multimeter that fits your needs.

★★★★★

TOP RATED

5 Out of 5 Stars

See The Top Rated AM-500 Series Digital Multimeters

Digital Multimeter Selection Guide

Rugged, high performance multimeters for troubleshooting any application

MODEL:	AM-510	AM-530	AM-570	37XR-A	38XR-A	HD110C	HD160C	AM-500	DM73C	PM51A	PM55A
	PG 13	PG 13	PG 13	PG 14	PG 14	PG 15	PG 15	PG 16	PG 16	PG 16	PG 16
	Professional Autoranging Digital Multimeters			XR Full-Size Digital Multimeters		Heavy Duty Digital Multimeters		Autoranging Digital Multimeter	Pen-style Digital Multimeter	Pocket Digital Multimeters	
Safety Rating	CAT III 600 V	CAT III 600 V	CAT IV 600 V	CAT III 600 V	CAT IV 600 V	CAT IV 1000 V	CAT IV 1000 V	CAT III 600 V	CAT II 600 V	CAT II 600 V	CAT II 600 V
True-RMS		•	•	•	•		•				
AC Voltage (V)	600 V	600 V	1000 V	750 V	750 V	1000 V	1000 V	600 V	600 V	600 V	600 V
DC Voltage (V)	600 V	600 V	1000 V	1000 V	1000 V	1500 V	1500 V	600 V	600 V	600 V	600 V
AC Current (A)	10 A	10 A	10 A	10 A	10 A	2 A	2 A	10 A			2000 µA
DC Current (A)	10 A	10 A	10 A	10 A	10 A	2 A	2 A	10 A			2000 µA
Microamps	•	•	•	•	•		•	•			•
Resistance	•	•	•	•	•	•	•	•		•	•
Capacitance	•	•	•	•	•		•		•	•	•
Inductance				•							
Frequency	•	•	•	•	•		•			•	•
Duty Cycle	•		•	•	•						
Relative Zero	•	•	•	•	•		•				
Temperature Inputs		1	2		1		1				
Diode Test	•	•	•	•	•	•		•	•	•	•
Continuity Beeper	•	•	•	•	•	•	•	•	•	•	•
Non-Contact Voltage	•	•	•								•
Logic Test				•							
Autoranging	•	•	•	•	•		•	•	•	•	•
Battery Test	•							•			
DC Loop Current 4-20m A					•						
dBm Reading				•	•						
Backlight	•	•	•	•	•		•				
Bar Graph		•	•	•	•		•				
Data Hold	•	•	•	•	•	•	•	•	•	•	•
Peak Hold (Crest)			•	•	•						
AutoTest Function (V,A,R)											•
Data Logging					•						
PC Interface Capabilities					•						
Auto Power-Off	•	•	•	•	•	•	•	•	•	•	•
Work Light (LED)	•	•	•								
Low Pass Filter			•								
Low Z			•								

AM-500 Series Digital Multimeters

Best-in-class autoranging, digital multimeters with features for residential, commercial electrical, industrial and HVAC applications. Features include True-RMS, dual thermocouples for measuring temperature differential, low impedance to detect stray voltage, low pass filter to accurately measure variable frequency drives and a built-in flashlight.

AM-510 Commercial/Residential Multimeter

Designed for light commercial and advanced residential applications, the AM-510 enables you to re-wire an electrical panel, install light fixtures, troubleshoot home appliances, electrical sockets and automotive electrical issues.

- **Voltage up to 600 V AC/DC, AC/DC current and resistance**
- **Frequency, capacitance and duty cycle**
- **VolTect™ non-contact voltage detection**
- **Audible continuity, diode test, backlit LCD display, data hold and relative zero mode**

AM-530 True-RMS Electrical Contractor Multimeter

Quickly troubleshoot voltage, perform repairs, run new wiring, check continuity on electrical connections, identify blown fuses, check motors or check transformers. The AM-530 is the perfect multimeter for the professional electrician.

- **Voltage up to 600 V AC/DC, AC/DC current, resistance, frequency, capacitance, and temperature**
- **True-RMS**
- **VolTect™ non-contact voltage detection**
- **Audible continuity, diode test, backlit LCD display, data hold and relative zero mode**

AM-570

AM-570 Industrial Multimeter

For professional electricians who need to maintain service or troubleshoot advanced electrical systems systems, the AM-570 is packed full of features such as True-RMS, dual thermocouples, a low impedance mode, and low pass filter to accurately take measurements on variable frequency drives.

- **AC/DC Voltage up to 1000 V, AC/DC current, resistance, frequency, capacitance, temperature and duty cycle**
- **Low Z – to detect stray voltages**
- **Low pass filter for variable frequency drives**
- **VolTect™ non-contact voltage detection**
- **Audible continuity, diode test, backlit LCD display, data hold and relative zero mode**

AM-570

Series Selection Guide			AM-510	AM-530	AM-570
	Application:	**Feature:**	**Res / Com**	**Electrical**	**Industrial**
Functions	Safety Rating	Safety	CAT III 600 V	CAT III 600 V	CAT IV 600 V CAT III 1000 V
Functions	Measure voltage in noisy environments	True-RMS		•	•
Functions	Electrical panels, AC outlets	AC Voltage (V)	600 V	600 V	1000 V
Functions	DC systems, auto/marine batteries	DC Voltage (V)	600 V	600 V	1000 V
Functions	AC Current - electrical panels, appliances	AC Current (A)	10 A	10 A	10 A
Functions	DC Current - electronics, DC motors	DC Current (A)	10 A	10 A	10 A
Functions	Specified resistance and continuity	Resistance (MOhms)	40 MΩ	40 MΩ	60 MΩ
Functions	Flame sensors	Microamps	•	•	•
Functions	Diodes in AC to DC converters	Diode test	•	•	•
Functions	Fuses, light bulbs, wire connections	Continuity	•	•	•
Functions	Household batteries	Battery test	•	–	–
Functions	Motor startup or run capacitors	Capacitance	•	•	•
Functions	Frequency verification	Frequency	•	•	•
Functions	Non-contact voltage detection	VolTect™	•	•	•
Functions	Electrical load-time on vs. time off	Duty cycle	•		•
Functions	Temp of air vents, fuses, transformers	Temperature inputs	-	1	2
Features	Automatically selects measurement range	Autoranging	•	•	•
Features	Manually select measurement range	Manual ranging	•	•	•
Features	Voltage on variable frequency drives	Low pass filter	–	–	•
Features	Detect stray voltages	Low Z	–	–	•
Features	Dimly lit areas	Built-in flashlight	•	•	•
Display	Meter resolution	LCD counts	4,000	4,000	6,000
Display	Dimly lit areas	Backlight	•	•	•
Display	Monitoring fast changing signals	Bar graph	–	•	•
Display	Two relative measurements on one screen	Dual display	–	–	•
Events	Data memory	Data hold	•	•	•
Events	Difference between two measurements	Relative reading	•	•	•
Events	Max/min peak measurement	Max/min hold	–	•	•
Events	Specialized signal measurements	Peak hold (crest)	–	–	•

INCLUDED ACCESSORIES: Test leads (pair), K-type thermocouple (AM-530, AM-570 only), batteries (installed), carrying case, user manual, temperature adaptor (AM-570 only)

CAT III 600 V — *AM-510, AM-530*

DUAL RATED CAT IV 600 V / CAT III 1000 V — *AM-570*

Recommended Accessories

DL248D
Deluxe Test Leads Kit (See Page 56)

TPK-62
Temperature Adapter and 2 Thermocouples for AM-570
(Replacement part)

TPK-59
Thermocouple (for AM-530)

38XR-A

★★★★★
TOP RATED
"Excellent - full featured multimeter - great price too!" *"I use this instrument on a daily basis when I visit various communication rooms to repair radio equipment. All I need is this and a laptop, and what a back saver!"*

- 38XR-A customer reviews

Recommended Accessories

DL248D	**Deluxe Test Leads Kit** (See Page 56)
CT235A	**Clamp Attachment**
CT237B	**Clamp Attachment**
CT238A	**Clamp Attachment** (See Page 56)
38SW-A	**RS232 Software/Cable (38XR-A DMM)**
USB-KIT3	**Software kit 38XR-A** (See Page 58)

DL248D

CT235A, CT237B, CT238A

38SW-A, USB-KIT3

XR Series Multimeters

The XR Multimeter Series lets lets you customize features and functions for your electronic, electrical, plant maintenance or HVAC applications.

HVAC contractors and field service technicians have a choice of the manual ranging 37XR-A with capacitance or the autoranging, True-RMS 38XR-A with temperature and backlight.

For electronics troubleshooting, the True-RMS 37XR-A offers component and logic test. If you're an engineer, designing or troubleshooting industrial automation and control systems, check out the 38XR-A, a True-RMS multimeter with bright blue backlight and an optical PC interface.

- **Autoranging**
- **Min/max and data hold**
- **Separate door for easy battery and fuse access**
- **Low battery indication**
- **Relative, peak, and average and data hold**
- **Analog bar graph**
- **Input warning tone when test leads are in wrong jack**
- **Auto power-off to save battery life**

FEATURE	37XR-A	38XR-A
True-RMS	•	
DC Voltage	1.000 mV, 10.00 V, 100.0 V, 1000 V	
AC Voltage	1.000 mV, 10.00 V, 100.0 V, 1000 V	
DC Current	100.0 µA, 1.000 µA, 10.00 mA, 100.0 mA, 400.0 mA, 10.00 A	
AC Current	100.0 µA, 1.000 µA, 10.00 mA, 100.0 mA, 400.0 mA, 10.00 A	
Resistance	1000.0 Ω, 10.000 kΩ, 100.00 kΩ, 1000.0 kΩ, 10.00 MΩ , 40.00 MΩ	
Continuity	•	
Diode	•	
Capacitance	40.00 nF. 400.0 nF, 4.000 µF, 40.00 µF, 400.0 µF	
Frequency	100.00 Hz, 1.0000 kHz, 10.000 kHz, 100.00 kHz, 1.0000 MHz, 10.000 MHz	
Temperature	–	-4°F → 2372°F (-20°C → 1300°C)
Duty cycle	0.00% → 90.0%	
Logic test	•	–
Inductance	40 H	–
dBm	-13 dBm → + 50 dBm	

INCLUDED ACCESSORIES: Magne-Grip™ holder with magnetic hanging strap, user manual, K-type thermocouple (38XR-A only), batteries (installed), test leads

Electrical Safety CAT III 600 V

DUAL RATED Electrical Safety CAT IV 600 V CAT III 1000 V

38XR-A only

HD110C and HD160C Heavy-duty Multimeters

Built for harsh environments, these unusually rugged meters offer extra features and superior protection that keep them operating reliably in heavy-duty applications.

- **Measures up to 1500 V DC and 1000 V AC and withstands transients up to 12 kV (CAT IV 1000 V) – unmatched by other digital multimeters**
- **IP 67 rated and sealed to prevent dirt, grime and moisture from entering the case and causing inaccurate readings or damaging shorts**
- **Tough, fire-retardant thermoplastic resists grease and chemical spills and other environmental hazards**
- **All sensitive components are shock-mounted for drop resistance to at least eight feet**
- **Magne-Grip™ holder with magnetic hanging strap frees both hands for work**
- **Automatic polarity indication**
- **Superior 10,000 count resolution with bar graph**
- **Bright backlight for superior visibility**
- **Auto power-off to save batteries plus low battery indication**

HD160C

FEATURE	HD110C	HD160C
True-RMS	–	•
DC Voltage	200.0 mV, 2.000 V, 20.00 V, 200.0 V, 1500 V	1000.0 mV, 10.000 V, 100.00 V, 1500.0 V
AC Voltage	200.0 mV, 2.000 V, 20.00 V, 200.0 V, 1000 V	1000.0 mV, 10.000 V, 100.00 V, 1000.0 V
Current AC/DC	200.0 µA, 2.000 mA, 20.00 mA, 200.0 mA, 2.000 A	100.00 µA, 1000.0 µA, 10.000 mA, 100.00 mA, 400.0 mA, 2.000 A
Resistance	200.0 Ω, 2.000 kΩ, 20.00 kΩ, 200.0 kΩ, 2.000 MΩ, 20.00 MΩ	1000.0 Ω, 10.00 kΩ, 100.00 kΩ, 1000.0 kΩ, 10.000 MΩ, 40.00 MΩ
Diode	•	–
Continuity	•	•
Frequency	–	100.00 Hz, 1000.0 Hz, 10.000 kHz, 100.00 kHz, 1000.0 kHz, 10.000 M Hz
Capacitance	–	40.00 nF, 400.0 nF, 4.000 µF, 40.00 µF, 400.0 µF
Temperature	–	-4°F → 2372°F (-20°C → 1300°C)

INCLUDED ACCESSORIES: Test leads, batteries (installed), user manual, Magne-Grip™ holder with magnetic hanging strap, K-type thermocouple, threaded alligator clips

★★★★★

TOP RATED

"Great product with unlimited features"

"A workhorse that does everything I need and then some."

- HD160C customer reviews

Recommended Accessories

DL248D **Deluxe Test Leads Kit**
(See Page 56)
CT235A **Clamp Attachment**
CT237B **Clamp Attachment**
CT238A **Clamp Attachment**
(See Page 56)

DL248D

CT235A, CT237B, CT238A

Why You Need a True-RMS Reading Multimeter.

Answer: True-RMS instruments are accurate on any AC waveform. There are two basic AC measuring systems. One is "average sensing, RMS indicating." This is the most common system because it is affordable and easy to manufacture. An instrument with this type of measuring system measures the average of a sine wave, and then multiplies it by 1.112, allowing the instrument to indicate RMS. This measuring system is only accurate on sine waves.

The second measuring method is called "RMS Sensing, RMS Indicating." An instrument with this type of measuring system computes the RMS value of the measured waveform (sine or otherwise). This is referred to as "True-RMS" reading. This measuring system is accurate for any waveform. When an average sensing instrument is used on a non-sinusoidal waveform, measurement accuracy could be off as much as 50%. Since you may not know what type of AC waveform you are measuring, a True-RMS instrument should be used whenever possible.

AM-500

AM-500 Autoranging Multimeter

For residential or DIY applications. Install, troubleshoot or repair light fixtures, fans, appliances, or automotive electrical problems with the ease and safety of a CAT III 600 V rated product.

- **Autoranging feature automatically sets up voltage, current, and resistance ranges**
- **Voltage up to 600 V AC/DC**
- **Resistance**
- **Audible continuity**
- **Data hold**
- **Diode test**
- **Auto power-off**

FEATURE	AM-500	BEST ACCURACY
AC Voltage	2.000 V, 20.00 V, 200.0 V, 600 V	±(1.0% Rdg + 3 LSD) @ 45 Hz – 400 Hz, 2 V to 200 V ranges
DC Voltage	200 mV, 2.000 V, 20.00 V, 200.0 V, 600 V	±(0.8% Rdg + 1 LSD) @ 2 V – 200 V ranges
Resistance	200.0 Ω, 2.000 kΩ, 20.00 kΩ, 200.0 kΩ 2.000 MΩ, 20.00 MΩ	±(1.0% Rdg + 2 LSD) @ 2 kΩ – 200 kΩ ranges
AC Current	200.0 µA, 2000 µA, 20.00 mA, 200.0 mA 2.000 A, 10.00 A	±(1.2% Rdg + 2 LSD) @ 200 µA to 200 mA ranges, 45 Hz – 400 Hz
DC Current	200.0 µA, 2000 µA, 20.00 mA, 200.0 mA 2.000 A, 10.00 A	±(1.0% Rdg + 2 LSD) @ 200 µA – 20 mA ranges
Battery Test	1.5 V, 9 V	±(10% Rdg + 3 LSD)

INCLUDED ACCESSORIES: Test leads (pair), batteries (installed), carrying case, user manual

DM73C

DM73C Multimeter with Built-in Test Probe

Take one-handed measurements with this pocket-sized pen-style digital multimeter.

- **Continuity beeper**
- **LCD display plus analog bar graph**
- **Auto power-off**

FEATURE	DM73C
AC Voltage	3.400 V, 34.00 V, 340.0 V, 600 V
DC Voltage	3.400 V, 34.00 V, 340.0 V, 600 V
Resistance	340.0 Ω, 3.400 kΩ, 34.00 kΩ, 340.0 kΩ, 3.400 MΩ, 34.00 MΩ

INCLUDED ACCESSORIES: Test lead with alligator clip, 2 batteries (installed), spare tip, user manual

PM51A

PM55A

PM Series Pocket Multimeters

Great things do come in small packages. Get innovative features, a full set of measurement functions and high safety ratings in an ultra-compact size. Only 3/8" (9.5 mm) thick, each meter weighs less than 3 oz (85 g).

- **Easy, one-touch button control**
- **Oversize, easy-to-read digital display**
- **VolTect™ non-contact voltage detection (PM55A only)**
- **Automatically selects AC volts, DC volts or resistance, for convenience (PM55A only)**
- **Low Z input impedance detect ghost voltages**
- **Hi Z input impedance for electronic circuitry (PM55A only)**
- **Continuity beeper**
- **Diode test**
- **Data hold**
- **30 ms high speed max hold**
- **Autoranging**
- **Auto power off**

FEATURE	PM51A	PM55A
AC/DC Voltage	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600 V	6.000 V, 60.00 V, 600.0 V
AC/DC Current	–	400.0 µA, 2000 µA
Frequency	400 Hz, 4 kHz, 40 kHz, 400 kHz, and 1 MHz	10.00 Hz – 30.00 kHz
Resistance	400.0 Ω, 4.000 kΩ, 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ
Capacitance	500.0 nF, 5.000 µF, 50.00 µF, 500.0 µF, 3000 µF	100.0 nF, 1000 nF, 10.00 µF, 100.0 µF
VolTect™ Non-Contact Voltage Detection	–	•

INCLUDED ACCESSORIES: Carrying case, battery (installed), user manual

Electrical Testers

Use Amprobe tools with confidence. Our tools are tested by Amprobe and certified by UL and other regulatory groups around the world. Amprobe tools are proven performers that protect you and your equipment.

★★★★★

TOP RATED

4.7 Out of 5 Stars

See the Top Rated TIC 300 PRO

INSP-3

48" Antenna

LT-10

INSP-3 Wiring Inspector

Verify in seconds whether a building's wiring complies with electrical code. Save time and money by testing more efficiently and identifying issues crucial to the safety and performance of an electrical system.

- **Large display shows all relevant test data, no scrolling or switching screens needed**
- **Find faulty wiring that needs repair without removing outlet cover plates or panel covers, including:**
  - **Faulty splices and connections**
  - **Incorrect wiring**
  - **Undersized wiring**
  - **Faulty or incorrectly wired AFCIs/GFCIs**
  - **Incorrect line voltage**
  - **Poor ground quality**
- **Verify performance of electrical systems with user selectable 10, 15 and 20 amp loads**
- **Flashing screen clearly indicates incorrect wiring or voltage drop test failure**
- **Test without tripping circuit breakers or blowing fuses**
- **Check grounding for safety and ability to support sensitive electronic equipment**

FEATURE	INSP-3	BEST ACCURACY
Load	Constant 10, 15 or 20 amp simulation regardless of line voltage	–
Operating Voltage	95 V AC → 140 V AC	+/- 2% + 2 LSD
GFI Trip	6.0 mA nominal to trip GFI, 30 mA to trip RCD	–
AFCI Trip	Up to 8, 120 AMP pulses within 1/2 second period	–

INCLUDED ACCESSORIES: Power cord, 9 V alkaline battery (installed), user manual, carrying case

LT-10 Fluorescent Lamp Tester

Troubleshooting fluorescent lamps is as easy as 1-2-3, saving you valuable time and money. The Amprobe Fluorescent Lamp Tester is a problem solving tool designed to easily test whether fluorescent light bulbs and ballasts are working prior to installation or removal. The intuitive single button operation allows you to troubleshoot lamps and avoid wasteful disposal of fluorescent light bulbs and ballasts. The compact tool easily fits in your pocket and the industry leading 48" antenna makes it easy to test fluorescent bulbs while still in the fixture, often eliminating the need to stand on a ladder.

- **Tests fluorescent (electroluminescent) lights**
- **Built-in VolTect™ non-contact voltage detection**
- **Filament pin test to check continuity of bulb**
- **Simple, one-handed, single button operation**
- **Ultra compact design for portability**
- **48" removable, fully retractable antenna included to test lights and voltage without a ladder**
- **Compatible with all fluorescent light bulbs:**
  - **T2, T4, T5, T8, T9, T10, T12 fluorescent energy saving light bulbs**

FEATURE	LT-10
Compatible lamps	T2, T4, T5, T8, T9, T10, T12 fluorescent energy saving light bulbs
Test voltage	Approximately 3 kV / 280 kHz
Field strength	Approximately 100 µV/m at 260 - 300 kHz
Maximum antenna length	48" (1.2 m)
VolTect™ non-contact voltage detection	AC 90 V to AC 600 V, 50/60 Hz to CAT II 300 V, CAT I 600 V
Filament pin test	T2, T4, T5, T8, T9, T10, T12

INCLUDED ACCESSORIES:
48" antenna, adaptor plate, user manual, battery and carrying case

TIC 300 PRO High Voltage Detector

Watch Video

Rugged and reliable for utility, industrial, heavy manufacturing and mine safety applications, the Amprobe TIC 300 PRO with VolTect™ detects voltages in low, medium and high voltage applications with bright visual and loud audible alerts.

- **Utility tool for checking transmission lines, power distribution equipment, down power lines, fuses, and load break connectors**
- **Lower voltage setting for checking voltage presence in breaker panels, breakers, power outlets and wiring**
- **Verifies presence of voltage from 30 V AC to 122,000 V AC (122 kV)**
- **MSHA certified and intrinsically safe**
- **Push button functionality for ease of use with PPE gloves**
- **Visual and audible voltage indication**
- **Self-test verifies tester works properly**
- **Ergonomic design with a convenient handle**
- **Drop-proof to 6' (1.8 m)**

FEATURE	TIC 300 PRO	TIC 410A
VolTect™ Non-Contact Voltage Detection	30 V AC ➞ 1500 V AC 1500 V AC ➞ 122,000 V AC (with Hot Stick TIC 410A)	–
48" length	–	•
Voltage		Up to 121 kV

INCLUDED ACCESSORIES: CC-300 PRO carrying case, user manual, batteries (installed)

Recommended Accessories

TIC 410A
Hot Stick for the TIC 300 PRO
Safely check voltages up to 122 kV with this 48" Hot Stick and the TIC 300 PRO.

CC-300 PRO Carrying Case
(Replacement part)

★★★★★
TOP RATED
"This tester is very accurate!" *"I have used these testers for years, this model is convienient, small enough to carry in my pocket, and is a great tester for all of your electrical needs. I totally recommend it."*
- TIC 300 PRO customer review

TIC 300 PRO

TIC 410A
Hot Stick
(Extends to 48")

Is it Hot or Not?

Why utility crews trust the Amprobe TIC 300 PRO

Feedback from a major US utility and the 30 underground crews who serve a North American city

In every truck, on every trouble call, there's one tool crews reach for first to ensure their safety: the TIC 300 PRO. It's the go-to tool for underground crews servicing secondary power lines for a large Northeastern US utility company. Approximately three hundred TIC PRO 300 tools are currently in use throughout their system.

The crew's work takes them down manholes under historic cities where the infrastructure is aging, and the problems are frequent. Whether they're working on 120 V, 240 V or 5 kV or greater, on cables, transformers, or switches, they begin each job by checking for live power with the TIC 300 PRO non-contact voltage detector. Every crew carries at least one unit and they use it daily, often multiple times each day.

Lights flash and the TIC 300 PRO beeps with increasing frequency as it nears a source of electricity, leaving technicians no doubt whether the source is live or not.

The crews like how simple the TIC 300 PRO is to use even with heavy gloves and full PPE on. They push one button to turn the unit on, another to select low or high range setting. After two decades of using TIC product line, the crews know it, trust it, and feel safe – it is exactly what they need.

PRM-4 Phase Sequence / Motor Rotation Tester

Phase sequence testing is crucial for many three-phase loads. Improperly connected motors can result in reverse rotation, which can damage the equipment powered by the motor. Ensure electrical equipment is correctly and safely connected with Amprobe's PRM-4.

- **Identifies 3-phase sequence**
- **Open phase check**
- **Motor shaft rotation indicator protected by CAT III circuitry**
- **3-phase to phase input voltage, 100 V AC to 600 V AC max**
- **45 to 70 Hz frequency**

PRM-4

INCLUDED ACCESSORIES: Test leads with alligator clips, carrying case, user manual, 9 V battery (installed)

Recommended Part

TL-PRM-4
Replacement Test Leads

MO-100 Milliohmmeter

Spot potential failures fast with the portable, battery powered MO-100. Check for opens or shorts in motor windings, generators and transformers. Test heating elements and wire-to-wire resistance in critical electrical connections.

- **Accurate four terminal measurement down to 100 µΩ without test leads resistance compensation**
- **Three test currents with over-temperature protection for measurement precision**
- **Protection against inadvertent connection to overvoltage**
- **Potential lead resistance, current lead resistance checks**
- **Indicates measurement errors due to temperature or connection problems**
- **Auto-hold and auto-off features**
- **Lightweight, robust and compact**
- **"O-Ring" sealed enclosure**

MO-100

9.8" (L) x 7.5" (W) x 4.3" (D)
(250 mm x 190 mm x 110 mm)

FEATURE	MO-100
Measuring Ranges	0 → 200.0 mΩ in steps of 100 µΩ 0 → 2000 mΩ in steps of 1 mΩ 0 → 20.00 Ω in steps of 10 mΩ 0 → 200.0 Ω in steps of 100 mΩ 0 → 2000 Ω in steps of 1 Ω
Test Current	1 mA (2000 Ω range) 10 mA (20 Ω / 200 Ω ranges) 100 mA (200 mΩ / 2000 mΩ ranges)

INCLUDED ACCESSORIES: User manual, test leads, batteries (installed)

Recommended Part

MO-100-LEADS
Replacement
Test Leads

VP-1000SB

Designed for safe and convenient, non-contact AC voltage detection without interruption to electrical systems, the VP-1000SB provides 3-way visual, audible and vibration alerts when AC voltage is present.

- **Designed to discern between hot and neutral wires up to CAT IV 1000 V AC**
- **Safety rated for indoor and outdoor applications**
- **Test for AC voltage cables, circuit breakers, wall sockets, junction boxes, and fuses**

FEATURE	VP-1000SB
AC Voltage Detection	90 ➞ 1000 V AC
Indicator	Lights, Beeps and Vibrates
Safety Rating	CAT IV 1000 V

INCLUDED ACCESSORIES:
User manual, batteries (installed)

VP-1000SB

VP-440 Non-contact Volt Probe®

Designed for safe, non-contact voltage detection, this voltage probe doesn't require much budget or demand much space. It fits conveniently in a shirt pocket, tool belt or pouch.

- **Safely check for AC voltages without disconnecting the electrical loads**
- **Test cables, circuit breakers, wall sockets, junction boxes, and fuses**
- **Completely insulated, with no exposed metal or conductive parts**
- **No current flow is needed for correct operation**

FEATURES	VP-440
AC Voltage Detection	100 V ➞ 1000 V
Indicator	Lights
Safety Rating	CAT III 1000 V

INCLUDED ACCESSORIES:
User manual, batteries (installed)

VP-440

ST-101B / ST-102B Socket Testers

Easily check and confirm proper wiring of electrical receptacles with the Amprobe ST-101B and ST-102B Receptacle Testers. Quickly test sockets and confirm wiring and operation of AC outlets with the ST-101B and confirm that GFCI breakers are properly wired for protection with the ST-102B.

- **Confirm proper wiring and operation of AC socket**
- **Easy-to-read lights indicate common wiring problems**
- **The trip test to confirm that GFCI protection is working properly (ST-102B only)**
- **For use on 110-125 V AC**

FEATURES	ST-101B	ST-102B
AC Voltage	110 V ➞ 125 V	110 V ➞ 125 V
GFCI	–	•

INCLUDED ACCESSORIES:
Instruction sheet

ST-101B

ST-102B

ST-101B

ST-102B

For ordering information see page 59. For detailed specifications go to ***www.Amprobe.com***

NEW 2015

PK-110 Electrical Test Kit

Amprobe's PK-110 Electrical Test Kit offers three electrical testers with testing functions suitable for a variety of residential applications. The kit includes the AM-420 Digital Multimeter, ST-102B Socket Tester with GFCI and VP-1000 Non-Contact Voltage Detector. From identifying voltage presence in outlets and switches to confirming proper wiring of regular and GFCI protected outlets, the PK-110 kit boasts all the features needed to perform quick and safe electrical tests.

AM-420 Digital Multimeter

- AC/DC voltage
- DC current
- Resistance
- Audible continuity and diode test
- Battery Test (1.5 V and 9 V)
- Data hold
- Safety rated: CAT II 250 V

VP-1000 Non-Contact Voltage Detector

- AC voltage detection
- Visual voltage Presence alert
- Safety rated: CAT IV 1000 V

ST-102B Socket Tester with GFCI

- Tests standard and GFCI outlets
- Verifies proper wiring
- Detects five different wiring faults
- CSA listed for safety

FEATURE	AM-420	VP-1000	ST-102B
AC Voltage	200.0 / 250 V	–	–
DC Voltage	200 mV 2.000 / 20.00 / 200.0 / 250 V	–	–
Operating Voltage	–	90 Vac → 1000 V AC, 50/60 Hz	110 – 125 V AC, 50 – 60 Hz

INCLUDED ACCESSORIES: User manual

PY-1A Voltage Tester

PY-1A

The PY-1A Voltage pocket-sized voltage tester detects AC and DC voltage ranges on cables, circuit breakers, wall sockets, junction boxes and other electrical wiring through direct contact.

- Neon lights indicate AC voltage at 120, 240, 277, 480 V and DC voltage at 160, 330, 380, and 600 V
- For use on energized or non-energized circuits
- Simple one hand operation, no buttons or setup required
- Test leads store conveniently in back of unit, properly spaced for outlet testing.
- CSA listed. Safety rated to European Standard 61010-01 Category III 600 V

FEATURE	PY-1A
AC Voltage	120 V, 240 V, 277 V, 480 V
DC Voltage	160 V, 330 V, 380 V, 600 V

INCLUDED ACCESSORIES: User manual

★★★★★
TOP RATED

"So many wonderful features for such a small package"

"Easy to read voltage display, probe securing, and convenient size are the features I like."

- PY-1A customer reviews

LAN-1 LAN Tester

LAN-1

With quick go/no-go tests, you can find opens, shorts and miswired cable installations. You can either step through the test cable one at a time, or let the unit automatically pulse through the pin-outs and display the results.

- Remote termination module tests installed cable on wall plate or patch panels
- Perform loopback or remote tests
- Buzzer sound warns for error condition in cable
- Two sets of LED lights indicate source and test
- Maximum line length: 328 yards (300 m)

FEATURE	LAN-1
Cable Types Tested	10/100 base-T; 10 base-2; RJ45; AT&T 258A; EIA / TIA 568A/568B; Token Ring
Continuity Maximum Length	> 300 meters
Connector Types	RJ45, BNC

INCLUDED ACCESSORIES: User manual, batteries (installed), remote terminator, RJ45 to female BNC cable, RJ45 to male BNC cable, RJ45 to RJ45 cable, Female BNC to Female BNC cable

★★★★★
TOP RATED

"I liked the ease of use"

"The tester was easy to use and worked very well in the field; it made the job a lot more easy. I recommend this tool for the field or home."

- LAN-1 customer reviews

Wire Tracers and Underground Locators

Wire tracing reinvented. With Amprobe's new AT-7000 wire tracer gives accurate results in minutes. New features and technologies simplify wire tracing and breaker identification. The Smart Sensor's™ patented sensor array and advanced signal processor provide instant feedback of wire location and direction on the large TFT LCD color display. Easily determine the direction and orientation of wires in walls, floors and ceilings up to 2 in/5 cm accuracy.

★★★★★

TOP RATED

5 Out of 5 Stars

See the Top Rated Advanced Wire Tracers

AT-7000 Advanced Wire Tracer

Get accurate results in minutes with new features and technologies that simplify wire tracing and breaker identification. The Receiver's patented Smart Sensor™, with its innovative new antenna design and advanced signal processor, clearly displays the location and orientation of energized wires in walls, floors and ceilings on the large color TFT LCD screen. The powerful Transmitter utilizes two optimal frequencies for both energized and de-energized wire and breaker tracing, delivering consistently accurate results for novice users and experts alike. The new Scan and Locate feature clearly identifies the one correct breaker or fuse, eliminating the confusion from multiple false positive readings, common in older technology tracing tools.

- **Traces wires in walls, ceilings, floors and corners**
- **Locates breakers and fuses**
- **Pinpoints shorts and opens**
- **High resolution 3.5" TFT LCD color display**
- **Three power modes**
  - "High" power mode for normal circuits
  - "Low" power mode for precision tracing in difficult areas
  - "Clamp" power mode provides a boosted signal using signal clamp
- **Two automatically selected frequency modes for optimal tracing on energized and de-energized circuits**
- **Signal booster rechargeable battery pack (BR-7000-T) increases transmitter signal strength**
- **Clamp-on attachment (SC-7000) for inducing signal into wires without access to bare conductors**
- **Embedded help screens make set-up easy and error free**

AT-7000-R
Receiver

AT-7000-T
Transmitter

SC-7000
Signal Clamp

	Features	AT-7020	AT-7030
Standard Features	Traces energized and de-energized wires	•	•
	Locates energized and de-energized breakers and fuses	•	•
	Finds shorts and opens	•	•
	Non-contact voltage detection	•	•
Advanced Features	Smart Sensor™ - wire position and direction indicator	•	•
	"Scan and Locate" breaker finder	•	•
	Two frequency modes for optimal tracing in energized (6 kHz) and de-energized (33 kHz) circuits	•	•
	Three power modes (high, low and clamp) for peak performance	•	•
	High resolution 3.5" TFT LCD color display	•	•
	Hot Stick attachment adapter	•	•
	Signal Booster Li-Ion Rechargeable 7.2V Battery Pack		•
	Signal clamp attachment		•

KIT CONTAINS:		AT-7020	AT-7030
AT-7000-R	Receiver unit with Smart Sensor, Tip Sensor and color TFT LCD display	•	•
AT-7000-T	Transmitter with two transmission frequencies (6 kHz and 33 kHz) and three power modes (high, low, clamp)	•	•
TL-7000	Test Lead Set with alligator clips (Black & Red), 30 ft. grounding lead, power cord, plug adaptors and light socket adapter	•	•
CC-7000	Custom Amprobe hard carrying case that securely holds transmitter, receiver, signal clamp, test leads and accessories	•	•
SC-7000	Signal Clamp accessory for inducing a signal into wires without access to bare conductors	*(optional)*	•
HS-1	Three-way magnetic hanger for AT-7000-T transmitter, allowing for convenient hanging of unit, placement on belt or as a stand	*(optional)*	•
BR-7000-T	Signal Booster Rechargeable Battery Pack (LI-ION, 7.2 V, 2.2 Ah), provides increased signal transmission power in High and Clamp modes	*(optional)*	•
BR-7000C	External battery charger for BR-7000-T	*(optional)*	*(optional)*

INCLUDED ACCESSORIES: Refer to the "Kit Contains" table above.

CAT IV 300 V

AT-7020

AT-7030

Watch Video

Tip Sensor

The shape of the tip sensor allows tracing in hard to reach areas, corners & tight spaces, as well as precise circuit breaker and fuse identification. By utilizing two different types of antennas (inductive coil and capacitive), the tip sensor enables optimal tracing results of both energized and de-energized circuits, which are automatically selected by operating mode.

Smart Sensor™

Quickly and easily determine the precise direction and location of energized wires in walls, floors and ceilings with the patented Smart Sensor™. Combined with a fast signal processor that measures small changes in the detected signal multiple times per second, this new technology provides unmatched precision and ease of use for tracing energized wires.

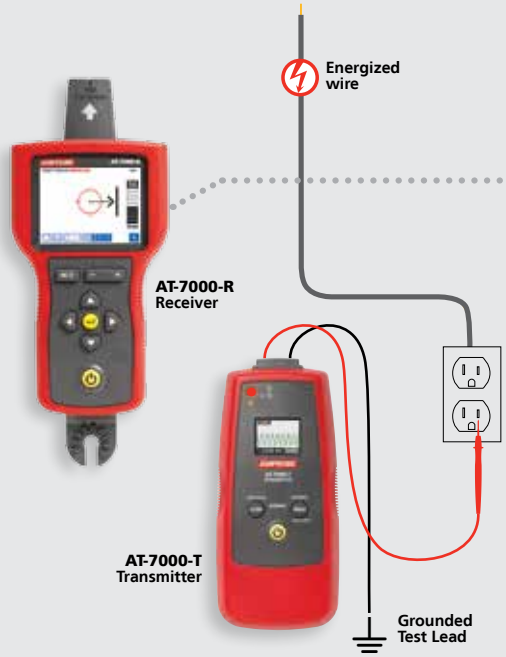
AT-7000-T Transmitter

Featuring three power modes high, low, and clamp, and two output frequencies (6kHz and 33 kHz), the AT-7000-T incorporates the best technologies available for optimal wire tracing and breaker identification on both energized and de-energized circuits. The AT-7000-T automatically sets the frequency based on detected voltage, and prompts users to set the power level based on their application. The color TFT LCD screen displays the detected voltage, frequency output and power mode.

Quick and Easy Wire Tracing with the Smart Sensor™

Tracing Wires in Walls, Ceilings and Floors

Tracing wires can be a challenge. The Amprobe AT-7000 makes tracing energized wires easier and more accurate than ever before. The Smart Sensor's™ patented sensor array and advanced signal processor provides instant feedback of wire location and direction on the large TFT LCD color display. Easily determine the direction and orientation of wires in walls, floors and ceilings up to 2 in/5 cm accuracy.



Large dynamic TFT LCD color display guides you in the direction and orientation of the energized wire.

Display shows when the Smart Sensor™ is centered over the location of the energized wire and indicates its precise direction and orientation.

AT-3500 Underground Cable/Pipe Locator System

AT-3500

Keep productivity high and operational costs low, with the AT-3500. This rugged, economical solution helps you locate underground energized and de-energized wires, cables and pipes. Great for parking lot and airport lighting applications, it precisely pinpoints buried services, with exceptionally fast sound and meter response.

- **Precisely pinpoint buried cables and wires**
- **Three testing modes for best accuracy:**
  - **Passive power (50 Hz / 60 Hz)**
  - **Passive radio (RF)**
  - **Active T-3500 signal generator with induction mode directly connected to the cable with test leads or optional clamp**
- **Proven 33 kHz frequency for most locating applications**
- **Avoid lines at utility construction sites with highly sensitive power and radio modes**
- **Take depth measurements up to 16' (4.9m)**
- **Backlit multiple-segment digital display with audible alerts to show and tell location of buried cables**
- **Semi-automatic gain control for fast signal location and control**

FEATURE	AT-3500
Depth Measurement	16 ft (4.9 m)
Passive Tracing Frequencies	50 Hz / 60 Hz
Transmitter Frequency	Single, non-adjustable
Receiver Active Frequencies (Hz)	32.768 kHz
Receiver Passive Frequencies (Hz)	Range 1: radio 15 kHz to 23 kHz Range 2: power network 50 Hz / 60 Hz; optionally 100 Hz (can be adjusted by Amprobe service personnel)
Receiver Depth Display Accuracy	Range 1: radio +/- 20% Range 2: power network +/- 20% Range 3: transmitter +/- 5% (>5 m (6 ft), +/- 20% (<5 m (15 ft)
Receiver Depth Range	Maximum 16 ft (4.9 m)

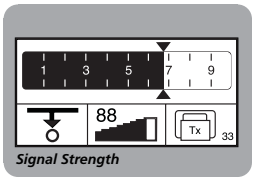
INCLUDED ACCESSORIES: Receiver, transmitter, connection cables, ground stake, carrying case, user manual, batteries (installed)

Recommended Accessories

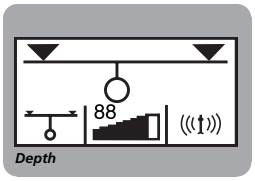
SC-3500 Signal Clamp
MLS55-3 Pipe Transmitter

SC-3500

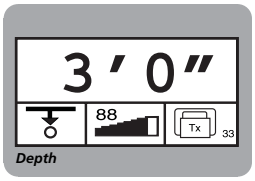
MLS55-3



Signal Strength



Depth



Depth

★★★★★
TOP RATED

"This product is great for finding depth and location"

"I've used one for years locating phone and gas lines and it works great. I can find and track wire or pipe and also know how deep within a few inches for digging and locating."

- AT-3500 customer reviews

AT-4000-A Series Advanced Wire Tracer

Amprobe invented wire tracer technology decades ago and continues to set the standard today. The most advanced of all wire tracers, the AT-4000-A Series combines the technology, features and functions to make wire tracing fast and precise.

- **One universal transmitter automatically switches to trace energized and non-energized (open, broken) wires**
- **Receiver is not position-sensitive - get accurate readings without rotating**
- **Locates breakers, neutrals, and ground lines**
- **Locates and traces wires in walls, floors, conduit, and computer cables**
- **Pinpoints shorts, ground faults and broken wires**
- **Performs tests without having to interrupt power**
- **Does not interfere with sensitive electronic equipment**
- **Precise sensitivity adjustment**
- **Battery booster strengthens signal for open tracing**
- **Clamp-on attachment injects signal for non-contact operation**

AT-4005-A

SPECS	RANGE
Transmitter operating voltage	9 V - 300 V AC/DC
Operating frequency	32.786 kHz
Receiver short mode range and open mode range	20' (6 m) in air from the traced wire under test conditions

FEATURES	AT-4001-A	AT-4004-A	AT-4005-A
Traces energized and de-energized wires	•	•	•
Locates energized and de-energized breakers and fuses	•	•	•
Finds shorts and opens	•	•	•
Clamp-on attachment for inducing signal into wires without access to bare conductors	–	•	•
Signal Booster 24V NiCad Rechargeable Battery Pack	–	–	•

KIT CONTAINS:	AT-4001-A	AT-4004-A	AT-4005-A
Carrying Case	Soft SV-1000	Hard CC-AT-4000	Hard CC-AT-4000
Receiver R-4000 CON	•	•	•
Transmitter T-4000	•	•	•
110V Pigtail - Banana Plug Cord Set C2901	•	•	•
Alligator Clip - Banana Plug Cord Set C2902	•	•	•
Grounding Test Lead 25' (7.6 m) MTL-G	•	•	•
Alligator Clip for Ground Lead VRC-320	•	•	•
Clamp-on Transmitter Accessory A2202	–	•	•
Rechargeable Battery Pack B2024	–	–	•
Battery Pack Recharger B2025	–	–	•
User manual	•	•	•

INCLUDED ACCESSORIES: Refer to the "Kit Contains" table above.

★★★★★

TOP RATED

"A must have for all electricians"

"This product will find wires buried in walls! Imagine being able to trace a circuit with a problem either from the receptacle device to where it has caused a problem or is discontinuous or shorted"

"With the AT-4004-A, I'm able to work in all situations with ONE unit! It's sensitive, easy to use, and with the optional clamp, it's easy to trace a conductor without the hassle of trying to find a suitable connection point."

- AT-4004-A customer reviews

Recommended Accessories

A2202 Clamp-on Transmitter Accessory

AT-2000-A Series Wire Tracers

Without interrupting power, you can trace live wires buried or hidden behind walls up to 13' (4 m) deep.

- **Traces unenergized and open (broken) wires**
- **Locates breakers, neutral and ground lines**
- **Locates and traces wires in walls, floors, conduit, computer cables, etc.**
- **Pinpoints shorts, ground faults and broken wires**
- **Does not interfere with sensitive electronic equipment**

AT-2005-A

AT-2004-A

FEATURES	AT-2004-A	AT-2005-A
Traces energized and de-energized wires	•	•
Locates energized and de-energized breakers and fuses	•	•
Finds shorts and opens	•	•
Clamp-on attachment for inducing signal into wires without access to bare conductors	•	•
Signal Booster 24V NiCad Rechargeable Battery Pack	–	•

KIT CONTAINS:	AT-2004-A	AT-2005-A
R-2000 Receiver	•	•
S2600-A Transmitter 9-300 V	•	•
T2200 Transmitter for open tracing	•	•
Clamp-on Transmitter Accessory A2201CE	•	•
B2024 Rechargeable Battery Pack	–	•
B2025 Battery Pack Recharger	–	•
C2901 Cordset 110 Volt Plug to Banana Plugs	•	•
C2902 Cordset Alligator Clips to Banana Plugs	•	•
User manual	•	•

INCLUDED ACCESSORIES: Refer to the "Kit Contains" table above.

AT-1000 Wire Tracer

For basic applications where accuracy and routine troubleshooting are important, choose the Amprobe first-tier circuit tracer.

- **Trace energized lines up to 300 V AC or V DC**
- **Trace unenergized and open conductors**
- **Identifies breakers and fuses without powering down**
- **Locates shorts**
- **Identifies wires in a bundle**
- **Identifies control, alarm and telephone system wiring**
- **Traces coaxial cable shield**
- **Receiver range 1 to 3 feet from a cable being traced**

AT-1000

FEATURE	AT-1000
Trace energized lines up to 300 V AC or V DC	100 V → 125 V AC (X1000 Transmitter)
Range 1-3' from a cable being traced	R1000 Receiver

INCLUDED ACCESSORIES: User manual, batteries (installed), transmitter, receiver, connection cables, carrying case

CT-100 and CT-326-C Current Tracers

For tough industrial applications, we recommend these heavy-duty current instruments to trace live wires buried underground or hidden behind walls up to 4' (1.2 m) deep.

- **Performs tests without having to interrupt power**
- **Locates breakers, neutral and ground lines**
- **Locates and traces wires in walls, floors, conduit, computer cables, etc.**
- **Pinpoints shorts and ground faults**
- **Does not interfere with sensitive electronic equipment**

FEATURES	CT-100	CT-326-C
Traces energized wires and locates breakers without interrupting power	9 V ➞ 300 V AC/DC	9 V ➞ 300 V AC/DC
Traces non-energized wires (continuity and grounded wire) and pinpoints shorts & ground faults	T-100 Transmitter & 9 V batteries	Transmitter & 9 V batteries
Digital filter to assure accuracy in noisy industrial environments	–	•
Sensitivity settings	3	12

INCLUDED ACCESSORIES: User manual, transmitter, receiver, connection cables, carrying case

CT-100

CT-326-C

★★★★★
TOP RATED

"This unit has proven to be 100% accurate every time. *It has never failed me and it is one of the first tools I purchase when going to work for a new company."*

- CT-326-C customer review

BT-250 Breaker Tracer

When you need to identify circuit breakers quickly and efficiently, count on this durable and dependable tracer.

- **Works on all electrical systems from 90 to 250 V AC**
- **Meets the latest code requirement**
- **Automatic sensitivity adjustment**
- **Extremely accurate reading always finds the right breaker**

FEATURES	BT-250
Voltage Range	90 V ➞ 250 V
Frequency Range	40 Hz ➞ 70 Hz

INCLUDED ACCESSORIES: User manual, transmitter, receiver, carrying case, connection cable, light fixture adapter, batteries (installed)

BT-250

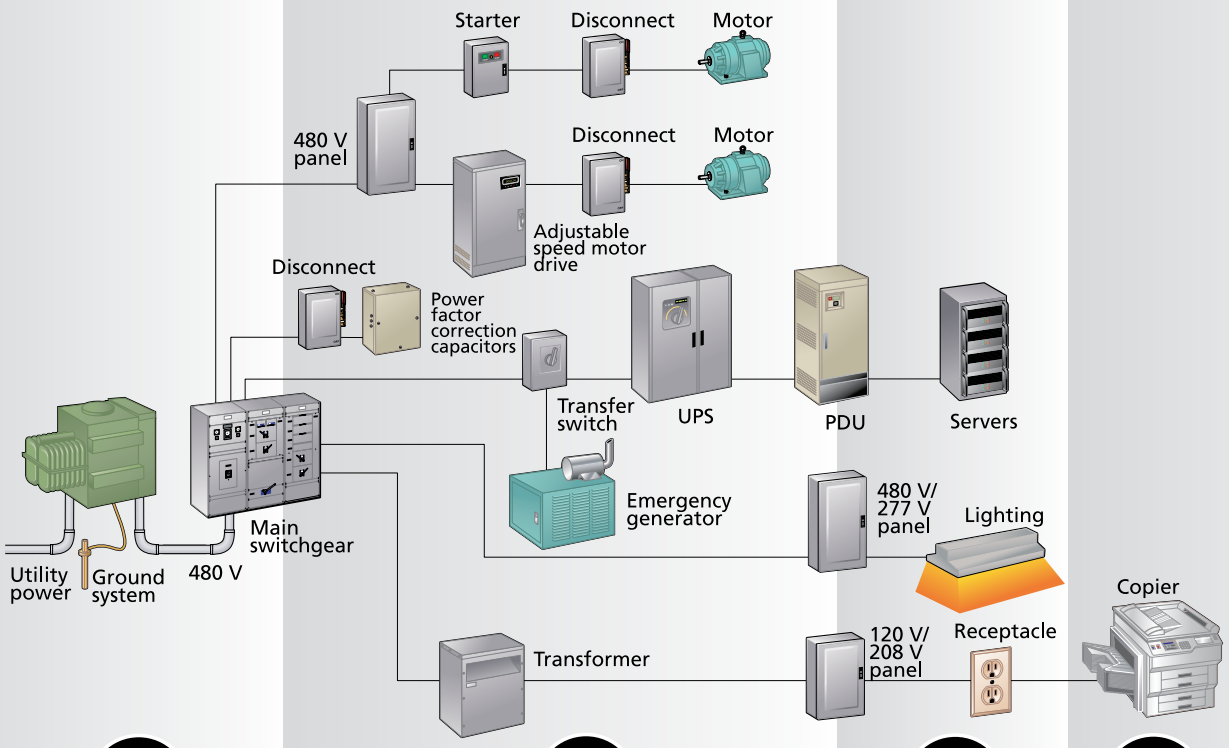
For ordering information see page 59. For detailed specifications go to ***www.Amprobe.com***

Safety Reference Guide

International safety standards

Test equipment must be designed to protect people who work in the high-voltage, high-current environments. In order to prevent injury, the International Electrotechnical Commission (IEC) develops international general standards for safety of electrical equipment for measurement, control and laboratory use. The most current standard 61010 specifies overvoltage categories for electrical distribution systems. The category rating increases based on the closeness to the power source and a higher level of user protection that is required from test equipment.

Proposed Energy Regions*



CAT IV

CAT IV
Three-phase at utility connection, electricity meters, outside and service entrance

CAT III

CAT III
Three-phase distribution, large building lighting systems, distribution panel devices

CAT II

CAT II
Appliances, portable tools

CAT I

CAT I
Electronics, signal level single-phase receptacle loads

* *Category ratings per IEC 61010-1*
Category boundaries may not be exact

Insulation
Ground
Power Quality

Reduce downtime, predict equipment life and cut energy costs with Amprobe tools. The Amprobe insulation resistance testers support your preventative maintenance programs while the Amprobe power quality tools help you conserve energy and keep your equipment operating at peak performance. Use the Amprobe ground testers to not only operate efficiently, but also safely.

★★★★★
TOP RATED
See Amprobe's Top Rated Insulation / Ground / Power Quality Testers

AMB-45 Digital Insulation Tester

Test insulation of wires, cables, transformers and electrical motors quickly and easily with this rugged tester.

- **Quickly test insulation of wires, cables, transformers and electrical motors**
- **Includes test leads and PC software**
- **Selectable test voltages 250 V, 500 V and 1000 V**
- **Programmable timer to perform the dielectric absorption ratio test**
- **Sensitive ohmmeter for checking resistance of motor windings**
- **Built-in voltmeter**
- **Data logging capabilities**
- **Download data to PC**

AMB-45

FEATURES	AMB-45
Insulation resistance (250 V DC)	4.000 MΩ, 40.00 MΩ, 400.0 MΩ, 4000 MΩ
Insulation resistance (500 V DC)	4.000 MΩ, 40.00 MΩ, 400.0 MΩ, 4000 MΩ
Insulation resistance (1000 V DC)	4.000 MΩ, 40.00 MΩ, 400.0 MΩ, 4000 MΩ
Low resistance	400.0 Ω, 4000 Ω
Voltage AC/DC	600.0 V

INCLUDED ACCESSORIES: Test leads, user manual, batteries (installed), carrying case, software & download cable

CAT III 600 V

Recommended Accessories

AMB-45-CABLE	USB to 3.5mm Male Connector Communication Cable

★★★★★
TOP RATED

"Met and exceeded my needs"

"The high volt and low ohm features go hand in hand with this type of meter, the memory and record feature that lets me download to my computer is just brilliant"

- AMB-45 customer reviews

AMB-25 Digital Insulation Resistance Tester

Quality tools don't have to be expensive. This affordable, rugged megohmmeters is fast and easy to use, and offers features you need for most insulation test applications including wires, cables, transformers and motors.

- **Selectable test voltages up to 1000 V**
- **Button lock for Dielectric Absorption Ratio (DAR) test**
- **Sensitive ohmmeter for checking resistance of motor windings**
- **Internal memory stores up to 9 readings**

AMB-25

FEATURES	AMB-25
Insulation resistance (250 V DC)	40.00 MΩ, 400.0 MΩ
Insulation resistance (500 V DC)	400.0 MΩ, 1000.0 MΩ
Insulation resistance (1000 V DC)	400.0 MΩ, 2000.0 MΩ
Low resistance	999.9 Ω

INCLUDED ACCESSORIES: Test leads, user manual, batteries (installed)

CAT III 600 V

AMB-50, AMB-55 and AMB-110
Industrial High Voltage Insulation Testers

Professional insulation diagnostics, automated calculations and step voltage testing satisfy the most demanding applications. Accurately test cables, transformers, motors, surge arrestors and generators in noisy environments such as high voltage switch yards. Built-in noise rejection filters and shielded test leads provide high EMI immunity.

- **Use one tester for low and high voltage systems with selectable test voltages:**
  - **AMB-50: 500 V, 1000 V, 2500 V and 5000 V**
  - **AMB-55: 250 V to 5000 V with 25 V increments**
  - **AMB-110: 500 V to 10,000 V with 25 V increments**
- **R(t) graph plots resistance in real-time to illustrate a response to the applied voltage**
- **Programmable timer**
- **Automatic discharge of test object after measurement is complete**
- **Measure and display all parameters simultaneously on large LCD**
- **Fast charging and testing**
- **Dual power source: receptacle or rechargeable batteries**
- **Built-in memory stores up to 1000 measurements with time and date**
- **Record and manage measurement data with PC Software via either RS232 or USB**

AMB-50

AMB-55

AMB-110

FEATURE	AMB-50	AMB-55	AMB-110
Insulation Resistance	0.5 MΩ → 20 GΩ, 2 MΩ → 40 GΩ, 5 MΩ → 100 GΩ, 100 MΩ → 1000 GΩ	0 Ω → 999 kΩ, 1.00 Ω → 9.99 MΩ, 10.0 MΩ → 100.0 MΩ, 1.00 Ω → 9.99 GΩ	
Test Voltage and Step Voltage Diaplay Range	0 V → 5000 V	0 V → 5500 V	0 V → 10000 V
Current Display Range	0 mA → 1.2 mA	0.00 nA → 9.99 nA, 10.0 nA → 99.9 nA, 100 nA → 999 nA, 1.00 µA → 9.99 µA, 10.0 µA → 99.9 µA, 100 µA → 999 µA, 1.00 mA → 5.50 mA	
Dielectric Absorption Ratio (DAR)	0 → 9.99	0.01 → 100.0	
Polarization Index (PI)	0 → 9.99	0 → 100.0	
Dielectric Discharge Test (DD)	0 → 9.99	0 → 100.0	
Leakage Current Display Range	1 mA → 1.2 mA	0 mA → 5.50 mA	
External Voltage Measurement	30 V → 600 V	0 V → 600 V	
Capacitance Measurement	–	0 nF → 99.9 nF, 100 nF → 999 nF, 1 µF → 50.0 µF	
Download PC Interface	•	•	
Memory Size	18 Measurements	128 kB	

INCLUDED ACCESSORIES: Test lead, large jaw alligator clips, batteries, user manual, carrying case, software, RS-232 cable (AMB-55, AMB-110 only), USB cable

CAT III 600 V *AMB-50*

CAT IV 600 V *AMB-55 AMB-110*

Recommended Accessories

AMB-50-KIT1 **Test leads (AMB-50)** (Replacement part)

AMB-KIT1 **Test leads (AMB-55, AMB-110)** (Replacement part)

AMB-KIT2 **10 KV Shielded Lead with Tip** (AMB-110 Replacement part)

AMB-50-KIT1

★★★★★
TOP RATED

"All the required tests can be done with this product"

"Measurement of dielectric discharge has importance in the measurement of insulation resistance, it's really a diagnostic insulation tester."

- AMB-110 customer reviews

AMB-3 Insulation Testers

AMB-3

Cut unscheduled downtime and reduce shock hazards. Quickly check the insulation resistance value of electric equipment and lines with this small, easy to-operate tester.

- **Sensitive ohmmeter for checking resistance of motor windings**
- **Built-in voltmeter**
- **Battery OK test**
- **Mirror scale**
- **Automatic discharge of equipment capacitance for safe removal of test leads**

FEATURE	AMB-3
Insulation Resistance with 500 V DC Test Voltage	0 Ω → 1000 MΩ
Voltmeter	0 → 600 V AC

INCLUDED ACCESSORIES: User manual, batteries (installed), carrying case, test leads

★★★★★
TOP RATED

"Best product on the market, job well done."
"Very easy to use and read, I would recomend this to anyone."

- AMB-3 customer reviews

AMC-2, AMC-3 and AMC-4 Hand-Cranked Insulation Testers

AMC-4

Test insulation of wires, cables, transformers and electrical motors without batteries or external power. With these hand-cranked tools, you're always ready to test.

- **Sensitive ohmmeter for checking resistance of motor windings**
- **Guard terminal eliminates surface leakage that may influence readings**
- **Light and smooth operating crank**
- **Rugged cross coil movement**
- **High impact housing**
- **Spring-loaded terminal connection**

FEATURE	AMC-2	AMC-3	AMC-4
Insulation Resistance with 500 V DC Test Voltage	0 Ω → 100 MΩ	–	0 Ω → 100 MΩ
Insulation Resistance with 1000 V DC Test Voltage	–	0 Ω → 500 MΩ	0 Ω → 500 MΩ
Low Resistance (5 V DC)	0 Ω → 200 Ω	0 Ω → 200 Ω	0 Ω → 200 Ω

INCLUDED ACCESSORIES: User manual, carrying case, test leads

★★★★★
TOP RATED

"Easy to read dial and durable."
"This is one of the most durable meters for testing resistance and simple to use."

- AMC-2 customer reviews

Recommended Accessories

AMC-LEADS **Test leads (AMC-2, AMC-3, AMC-4)** (Replacement part)

No Hassle Warranty

No waiting. No shipping charges.

Amprobe is committed to delivering the highest quality test and measurement products and provides a 1 year warranty with most products. The length of the product warranty is stated in the user's manual that comes with each product, which can be downloaded from **www.Amprobe.com.**

To better serve you, in the unlikely event that an Amprobe product requires warranty service, Amprobe authorizes over-the-counter product exchange from any authorized Amprobe distributor within 30 days from the date of purchase for products with a list price up to $500. For products with a list price greater than $500 or for issues encountered after the first 30 days but within the warranty period, please contact the Amprobe Service Department at **1-877-AMPROBE** for warranty services.

GP-2A Ground Resistance & Resistivity Tester

For installation and troubleshooting, this instrument provides accurate and reliable measurements of ground resistance and soil resistivity to help you reduce power quality problems.

- **Measures earth ground resistance with 3-point (fall of potential) or 2-point tests**
- **Calculates resistivity with 4-point test**
- **Automatic voltage measurement prevents false measurements**
- **Autoranging**
- **Store up to 999 measurements**
- **Create custom reports by downloading data to a PC**

GP-2A

FEATURE	GP-2A
Ground Resistance	1999 Ω
Ground Resistivity	314 kΩm
AC Currrent	–
AC Voltage	0 V – 460 V

INCLUDED ACCESSORIES: User manual, batteries (installed), connection cables, 4 ground stakes, PC software and USB cable, carrying case

CAT III 240 V

Recommended Accessories

AMPRB-ET4	**Set Earth Testing Accessory Kit** (Replacement part)

DGC-1000A Clamp-on Ground Resistance Tester

User-friendly and accurate, the DGC-1000A helps you work safely without test leads or auxiliary electrodes. The on-board memory and data logging features improve efficiency.

- **Accurate ground resistance measurements from 0.025 to 1500 Ohms**
- **True-RMS current and leakage current measurements**
- **Accurate readings in less than 10 seconds**
- **Audible alert if continuity beep if the resistance is below 40 Ohms**
- **Data logging capability - 116 records**
- **Individual data point recordings**
- **User selectable high and low ohm audible alerts**
- **Auto power-off (can be disabled)**
- **Low battery indicator**

DGC-1000A

FEATURE	DGC-1000A
Ground Resistance	0.025 Ω ➞ 1500 Ω
Ground Resistivity	–
AC Currrent	0.2 mA ➞ 30.00 A
AC Voltage	–

INCLUDED ACCESSORIES: Carrying case, user manual, resistance calibration plate, batteries (installed)

DUAL RATED CAT III 300 V / CAT II 600 V

★★★★★
TOP RATED

"Great instrument. An advantage to have."

"This tool proved invaluable and allowed the customer to save thousands on downtime and predictive maintenance, I highly recommend it."

- DGC-1000A customer reviews

DM-III Multitest F

DM-III Multitest F Power Quality Recorder

Cut energy costs and improve operating efficiency with the Amprobe full-featured three-phase Power Quality Recorders. They offer the essential functions and capabilities for today's demanding electrical environments.

- **Measures and records a broad spectrum of power quality parameters with True-RMS accuracy**
- **Compatible with a wide range of current transducers**
- **Works with single- and three-phase systems (Y and Delta)**
- **Detects and records voltage anomalies, sags and surges**
- **Tests insulation of wires, cables, transformers and electrical motors**
- **Programmable timer to perform the Dielectric Absorption Ratio Test**
- **Selectable polarization of ohmmeter for checking grounding continuity**
- **Built-in scope displays waveforms**
- **Manual and programmable recording start**
- **Ensure uninterrupted data recording with password protection**
- **Records up to 64 parameters (single- or three-phase) simultaneously**
- **Special data compression system and user selectable rates allow recording from several hours to several years**
- **Downloads measurements to PC with software**
- **Line or battery powered**
- **Automatic voltmeter protects against misuse on hazardous energized systems**

★★★★★
TOP RATED

"Definitely worth the investment!"

"This meter has a lot of useful features that can be used to monitor services, equipment, generators or individual circuits. It can be used to record before and after any work done to document savings on power factor correction, energy efficient lighting, VFDs instead of cross the starters - worth the money."

- DM-III Multitest F customer reviews

FEATURE	DM-III MULTITEST F
AC Voltage	600 V
AC Currrent	3000 A
Optional CTS	100 A
Harmonics	THD, DC to 49th
Power	W, VAR, VA
Energy	Wh, WARh, VAh
Voltage Anomalies	Sag / Surge
Power Factor	0.00 +/- 1.00
Frequency	50 / 60 Hz
Phase Sequence	1-2-3
Insulation Tester	50 V, 100 V, 250 V, 500 V, 1000 V
Ground Resistance	Resistance & Resistivity

INCLUDED ACCESSORIES: External power supply, user manual, test leads, ground resistance test leads with 4 ground stakes, carrying case, PC software with USB cable, 3 current transducers (3000 amps)

CAT III 600 V

Recommended Accessories

CC-DM-III	**Hard Carrying Case**
DM-CT-100	**100 Amp Current Transducers**
DM-CT-HTA	**1000 Amp Current Transducers** (included with DM III Multitest F)
AM-FLEX33	**3000 Amp Flexible Current Transducer**
C2006	**PC Cable and Software Interface** (Replacement part for DM III Multitest F)
DMT-EXTPS	**External Power Supply** (Replacement part for DM III Multitest F)
TLDM	**Test Lead Set** (Replacement part for DM III Multitest F)

Temperature

Turn to Amprobe for the tools you need as a HVAC/R, electrical, industrial maintenance, or automotive professional. We offer a complete line of temperature measurement tools, ranging from infrared to specialized thermometers that remotely capture readings.

★★★★★
TOP RATED
See the Top Rated IR-750 Infrared Thermometer

IR-700 Series Infrared Thermometers

The Amprobe IR-700 Series Infrared Thermometers offer five IR thermometers with precision performance, unparalleled accuracy and response time. Specifically designed for HVAC/R, electrical, industrial maintenance, automotive as well as quality control and fire prevention applications.

- **Distance to Spot ratio up to 50:1**
- **Wide temperature ranges**
- **Adjustable emissivity for measuring a variety of materials**
- **Min/max memory**

IR-750

	IR-710	IR-720	IR-730	IR-750
Distance to Spot (D:S)	**10:1**	**20:1**	**30:1**	**50:1**
Temperature Range	0°F to 716°F -18°C to 380°C	-26°F to 1922°F -32°C to 1050°C	-26°F to 2282°F -32°C to1250°C	-58°F to 2822°F -50°C to1550°C
Best Accuracy	±2% (Typical)	±1.8% (Typical)		
Emissivity	0.95	Adjustable from 0.10 to 1.00		
Display Resolution	0.1°C / 0.1°F			0.1°C / 0.1°F of reading < 999.9
Backlit dual LCD display	•	•	•	•
Auto display and MIN/MAX Memory	•	•	•	•
DIF/AVG Temperature Display	–	•	•	•
Tripod mount	–	•	•	•
Programmable high and low alarm	–	–	–	•
USB cable	–	–	–	•
Built-in memory	–	–	–	99
K-type thermocouple measurement	–	–	–	•

INCLUDED ACCESSORIES: Battery (installed), user manual Carrying case: IR-720, IR-730, IR-750
IR-750 only: K-type thermocouple, USB cable and software CD

Recommended Accessories

EPS-700	**External Power Supply IR-750** (Optional accessory)

★★★★★
TOP RATED

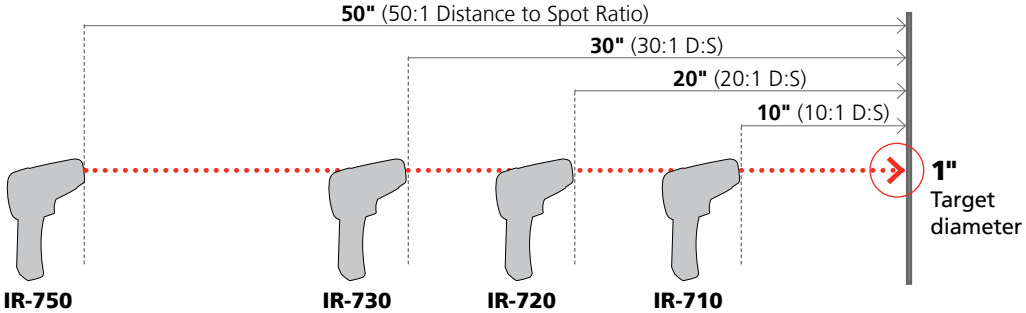
"Excellent resolution"

"Great tool for taking temp readings while keeping your hands away from moving parts.

I have used this tool to take temp readings on radiators, air conditioners and engine parts while the engine was running, keeping my hands at a safe distance. I would recommend this tool."

- IR-750 customer reviews

100% of customers who reviewed this product also recommend it.



Distance to Spot Ratio

The larger the Distance to Spot (D:S) ratio, the better the resolution and the smaller the area that can be measured. The IR-750 with a D:S of 50:1, will measure a 1" diameter at a distance of 50" away, perfect for demanding quality and process control applications.

IR-450 Infrared Pocket Thermometer, Laser Pointer and Flashlight

A must have tool for everyday applications, the IR-450 3-in-1 Infrared Pocket Thermometer, Laser Pointer, and Flashlight offers a uniquely small and convenient form factor with professional 8:1 distance to spot ratio. More portable than traditional infrared thermometers, quickly check temperatures in HVAC/R, fire safety and protection, industrial maintenance, automotive and quality control applications.

- **8:1 Distance To Spot (D:S) ratio**
- **Bright laser pointer**
- **Built-in LED flashlight to illuminate dark areas**
- **Holds temperature reading (selectable °F/°C) for ten seconds**

SPECIFICATIONS	IR-450
Range	-22°F → 932°F (-30°C → 500°C)
Distance to Spot Size	8:1 ratio
Best Resolution	0.5°F (0.2°C)
Best Accuracy	+/- 4°F (2°C)
Emissivity	Pre-set 0.95

INCLUDED ACCESSORIES: Battery (installed), user manual, pocket clip

IR-450

IR608A Infrared Thermometer with Laser Pointer

Point and press for quick and easy non-contact temperature measurement. Use this effective diagnostic tool to identify temperature for HVAC, fire safety and protection, industrial maintenance, automotive and quality control.

- **Pocket-sized, ergonomic design**
- **Laser sighting for accurate targeting (CE EN60825 certified Class II)**
- **Display hold**
- **Fast response time**
- **Backlight display for visibility in a variety of working conditions**
- **Low battery indicator**

SPECIFICATIONS	IR608A
Range	0°F → 750°F (-18°C → 400°C)
Distance to Spot Size	8:1 ratio
Best Resolution	0.5°F (0.2°C)
Best Accuracy	+/- 2% of reading or +/- 3.5°F (+/- 2°C) whichever is greater
Emissivity	Pre-set 0.95

INCLUDED ACCESSORIES: Battery (installed), user manual

IR608A

★★★★★
TOP RATED

"It doesn't get any easier."

"I would recommend this tool very highly to HVAC technicians and anybody that has to evaluate heat loss and efficient use of energy."

- IR608A
Customer reviews

THWD-3

THWD-3 and TH-3 Relative Humidity and Temperature Meters

An exceptionally wide ambient temperature range makes these meters versatile and accurate.

- **Large LCD displays two measurements simultaneously**
- **Extended probe stem for easy access to air ducts**
- **Dew point and wet bulb (THWD-3 only)**
- **Min/max readings**
- **Temperature measurement range: -4°F (-20°C) to 140°F (60°C)**
- **Data hold**
- **Capacitive sensor with protective cover**
- **Auto power-off**

INCLUDED ACCESSORIES: Carrying case, battery (installed), user manual

TH-1

TH-1 Compact Probe Style Relative Humidity Meter

Slip this little meter in your pocket and be ready for quick temperature and humidity checks.

- **Displays relative humidity and temperature simultaneously**
- **Measure wet bulb and dew point**
- **Precision capacity relative humidity sensor with twistable protective cap**
- **Results in metric or English**
- **Stores min/max readings for comparisons**
- **Data hold**

FEATURE	THWD-3	TH-3	TH-1
Temperature – Internal Sensor	-4°F → 140°F (-20°C → 60°C)		-44°F → 122°F (-20°C → 50°C)
Relative Humidity	5 → 95%		10 → 95%
Dew Point Temp	•	–	•
Wet Bulb Temp	•	–	•

INCLUDED ACCESSORIES: Carrying case, user manual, battery

THWD-5

THWD-5 Relative Humidity and Temperature Meter with Wet Bulb and Dew Point

Designed for HVAC technicians and plant maintenance engineers, this microprocessor-based psychrometer provides quick, easy access to wet bulb and dew point values as well as temperature and relative humidity.

- **Extended probe for easy access to targets**
- **Large digital dual display with backlight makes readings easy-to-see**
- **Temperature with 0.1 degree resolution in °F or °C, front panel selectable**
- **Stores min/max measurements**
- **Data hold freezes last reading**
- **Tripod mountable**

FEATURES	RANGE	BEST ACCURACY
Relative Humidity	0% → 100%	+/- 3% from 10% → 90% (at cal temp) +/- 5% for other
Temperature	14°F → 140°F (-10°C → 60°C)	+/- 0.6°C (+/- 1°F)
Dew Point Temp	-100.0°F → 139.8°F (-73.4°C → 59.9°C)	-
Wet Bulb Temp	7.88°F → 139.8°F (-13.4°C → 59.9°C)	-

INCLUDED ACCESSORIES: Carrying case, user manual, batteries (installed)

TMD-56 Thermometer

The professional choice for HVAC technicians, electricians and research, industrial process, and quality control applications, this thermometer offers dual inputs for easy super-heat and sub-cool temperature measurements. Monitor and track temperatures, the multi-logging thermometer features real-time clocks with a calendar, user-selectable recording intervals, and easy data recall using up and down keys.

- **°F/°C selectable**
- **Dual input: T1, T2, T1-T2**
- **Audible alert with Hi/Lo settings for out-of-range measurements**
- **Min/max with elapsed time, average, relative, hold functions**
- **Time and relative settings**
- **In-field thermocouple offset adjustment**
- **Robust holster protects the instrument**
- **Auto power-off saves batteries**
- **Download data to PC via USB**
- **Data capture: 256 samples with real-time data**
- **Data logging: 16 sets, maximum 16,000 data points**
- **Thermocouple offset adjustment**
- **Record, max, min, max-min, average, relative zero and hold functions**
- **Audible alerts with Hi/Lo setting**
- **Resolution 0.1°F/1°F (0.1°C/1°C)**

TMD-56

FEATURE	TMD-56
Thermocouple Type	K
Basic Accuracy	0.05%
Number of Parameters on the Display	3
Real Time Clock - Wireless Beeper with Setting	•
Data Capture	256 Samples
Data Logger	16000 Points
PC Interface	USB

THERMOCOUPLE TYPE	TEMPERATURE RANGE
K-TYPE	-328°F → 2501°F (-200°C → 1372°C)
J-TYPE	-346°F → 2192°F (-210°C → 1200°C)
T-TYPE	-328°F → 752°F (-200°C → 400°C)
E-TYPE	-346°F → 1832°F (-210°C → 1000°C)
R-TYPE	32°F → 3212°F (0°C → 1767°C)
S-TYPE	32°F → 3212°F (0°C → 1767°C)
N-TYPE	-58°F → 2372°F (-50°C → 1300°C)

INCLUDED ACCESSORIES: USB cable and software, user manual, 2 K-type thermocouples, batteries (installed)

★★★★★
TOP RATED

"Works great, use it all the time"

"Get a lot of use out of it, I'm a maintenance tech in a large paint shop and use it to check oven temps, I can log temps throughout the day and download on the computer. Great product with a lot of features."

TMD-56
Customer reviews

For ordering information see page 59. For detailed specifications go to ***www.Amprobe.com***

TR200-A Temperature and Relative Humidity Data Logger

TR200-A

One compact unit monitors both temperature and humidity and records it on your PC using the USB interface. Amprobe software included.

- **Record sample interval timing, start/stop, date, time, Hi/Lo alarm threshold, and units**
- **Visible LED warnings alert you to air quality problems**
- **IP-65 rating for dust and moisture**
- **Wall mountable**

INCLUDED ACCESSORIES: Batteries (installed), user manual, PC software CD and USB cable

TR300 Temperature and Relative Humidity Data Logger

TR300

Wall-mountable, self-standing, or tri-pod mountable, this data logger configures to your application.

- **Temperature, relative humidity, dew point or web bulb measurements with real-time date/ hour stamp**
- **Audible and visual alerts help you monitor IAQ conditions**
- **Stores up to 16,000 readings**
- **Records data to a PC with USB cable and Amprobe software included**
- **Programming on-screen or from the PC**

FEATURES	TR200-A	TR300
Dual Display LCD	–	•
Air Temperature Reading	14°F ➞ 140°F (-10°C ➞ 60°C)	-4°F ➞ 158°F (-20°C ➞ 70°C)
Temperature Accuracy	+/- 1°F (+/- 0.6°C)	+/- 1°F (+/- 0.6°C)
RH Reading	0.0 to 99.9%	0 to 100%
RH Accuracy	+/- 3% at 77°F (25°C)	+/- 3% from 10 - 90%
Recording	16000	16000
Dew Point Reading	–	•
On Screen Programmable	–	•
Software Programmable	•	•

INCLUDED ACCESSORIES: Batteries (installed), user manual, PC software CD and USB cable

★★★★★
TOP RATED
"Excellent documentation"
"Customer says it is too hot in the office. Is there really a problem? Now you can know for sure one way or the other."

- TR300 customer reviews

Environmental

High quality tools designed to save HVAC/R professionals time, money and keep buildings healthy. Amprobe offers a complete line of tools, designed specially for measuring environmental variables from simple one-time checks to advanced instruments that measure humidity and airflow, and check for gas leaks.

★★★★★
TOP RATED
See the Top Rated GSD600 Gas Leak Detector

MT-10

MT-10 Moisture Meter

Measure the moisture content of wallboard, wood, mortar, plaster or other building materials to identify areas of water damage or harmful mold growth. Check wood or concrete flooring before installation, wood during drying or before woodworking.

- Three-color LED indicates moisture severity
- Backlight makes display visible in dim areas

INCLUDED ACCESSORIES: User manual, battery

★★★★★
TOP RATED

"If you build quality, this is your tool."

"I watched the Amprobe MT-10 in action when my insurance adjuster came to check out ceiling damage. The rafters without visible water damage showed moisture, the insulation that needed replacing was quickly identifiable and the wall showed the path the water took to the next floor. Wow, this will save waiting to see mold or disintegration long before permanent damage."

- MT-10 customer reviews

TMA5

TMA5 Mini Vane Anemometer

This pocket-sized tool gives you an easy way to measure air flow, temperature and humidity in the HVAC systems of residential, commercial or industrial buildings.

- **Measures air velocity, temperature and ambient temperature (in °F or °C), humidity, dew point, wet bulb, wind chill**
- **Simple, two-button operation**
- **Selectable wind units: mph, ft/m, Knt, m/s, km/h, BF**
- **Maximum wind speed display**
- **Data hold**
- **Auto power-off with disable feature**
- **Low battery indication**
- **Ergonomic design with wrist strap**
- **External temperature probe included**

FEATURE	TMA5
Wind Speed Range	0.5 → 44.7 mph, 60 → 3937 ft/m, 0.4 → 38.8 knt, 1.1 → 20.0 m/s, 0.7 → 72.0 km/h, 1 → 8 BF
Air Temperature Range	32°F → 122°F (0°C → 50°C)
External Temperature Range	-4°F → 158°F (-20°C → 70°C)
Air RH% Range	5% → 95% RH
Wind Speed Response	averaging every 2 seconds
Temperature Response Time	60 seconds (typical)
Air RH% Response Time	60 seconds (typical)
Wind-Chill Display	•
Dew Point Temperature	•
Wet Bulb Temperature	•

INCLUDED ACCESSORIES: Battery (installed), user manual, external temperature probe, ergonomic wrist strap

Recommended Accessories

TPK-60 **K-type external temperature probe**

TMA10A Anemometer with Flexible Precision Vane

The essential tool for HVAC technicians, the TMA10A measures air velocity or volume (CFM), plus temperature. Just enter surface area type for accurate airflow measurements.

- **Large dual display for viewing airflow or velocity measurement including temperature**
- **Long flexible cord to access remote vanes**
- **Continuous moving average for up to 2 hours**
- **Air velocity average for up to 8 points**
- **Multi-point air flow (cfm) average**
- **PC interface for charting or analysis**
- **Min/max/average reading on a single point**
- **Data hold**
- **Auto power-off function**

FUNCTION	RANGE	BEST ACCURACY
Air Velocity	0.40 ➞ 25.00 m/s	+/- 2% of full scale
	125 ➞ 4900 ft/min	+/- 2% of full scale
Air Flow	0.01 ➞ 99.99 m^3/sec	0 ➞ 9.999 m
	1 ft ➞ 9999 cfm	0 ➞ 9.999 ft
Air Temperature °F (°C)	32°F ➞ 122°F (0°C to 50°C)	+/- 1.5°F (0.8°C)

INCLUDED ACCESSORIES: Carrying case, battery (installed), user manual, optional PC interface for charting or analysis

★★★★★

TOP RATED

"Does all that is asked of it! It is highly accurate and results are repeatable."

- TMA10A customer review

TMA10A

Recommended Accessories

TM-SWA **USB Download Cable and Software CD**

(See Page 83)

TMA40-A Anemometer, Relative Humidity and Temperature

With one tool, you can measure air velocity (FPM) or air volume (CFM), relative humidity, and temperature. Large digital display with backlight and flexible measurement vane makes measuring easier in difficult areas. Measures up to 99 points and logs up to 2400 measurements.

- **Flexible measurement vane for accessing difficult areas**
- **Measures air velocity (fpm), air volume (cfm), relative humidy, and temperature**
- **Measure up to 99 points**
- **Data logging up to 2400 data points**
- **Optional PC interface for charting or analysis**
- **Large digital display with backlight**

FUNCTION	RANGE	RESOLUTION	ACCURACY
Air Velocity	0.4 to 32 m/s (1.3 to 105 ft/s)	0.1 m/s (0.1 ft/s)	+/- 3%
Air Volume	0 ➞ 99999 (cfm/cmm)	0.1 CMM - 1 CFM	+/- 3%
Temperature	-4°F ➞ 158°F (-20°C ➞ 70°C)	0.1°F (0.1°C)	± 0.6°C (± 1°F)
Relative Humidity	0 ➞ 100%	0.1%	+/- 3% @ 77°F (25°C)

INCLUDED ACCESSORIES: Carrying case, battery (installed), user manual, optional PC interface for charting or analysis

★★★★★

TOP RATED

"Great tool."

"The Amprobe TMA40-A is a great tool for air flow measurement. It does dew point, wet bulb, dry bulb, air speed, and air velocity. Great tool for troubleshooting duct problems."

- TMA40-A customer reviews

TMA40-A

Recommended Accessories

TM-SWA **USB Download Cable and Software CD**

(See Page 83)

TMA-21HW

TMA-21HW Hot Wire Anemometer

Hot wire anemometer technology eliminates bearings and rotating parts to make these meters durable and measurements stable and accurate. It's the simple, safe way to monitor indoor air quality and measure air flow and temperature in residential, commercial and industrial air conditioning systems.

- **4' (1.2m) telescopic wand - no ladder needed for most commercial applications**
- **Measures air flow volume in CFM, CMM**
- **Instant average, 2/3 Vmax flow measurements**
- **Velocity m/s, ft/min, knots, km/hr, mph**
- **Relative humidity and temperature measurement**
- **Data hold, min/max with time stamp**
- **Data memory and real-time function (99 sets)**
- **512KB auto data-logging capacity**
- **USB interface**
- **Wet bulb and dew point**
- **Large backlight LCD display shows five parameters**

FEATURE	TMA-21HW	BEST ACCURACY
Air Flow	0.10 m/s ➞ 30.00 m/s 0.2 km/hr ➞ 110.0 km/hr 10 ft/min ➞ 6000 ft/min 0.10 knots ➞ 59.0 knots 0.12 MPH ➞ 68.00 MPH	+/- 3% of rdg +/-1% FS
Air Flow Volume	0.000 CFM ➞ 999900 CFM 0.000 CMM ➞ 999900 CMM	+/- 3%
Temperature	- 4°F ➞ 140°F (-20°C ➞ 60°C)	+/- 0.9°F (+/- 0.5°C)
Relative Humidity	0.0 ➞ 100%	+/- 3%
Data-logging via USB	•	–
Wet Bulb / Dew Point	•	–

INCLUDED ACCESSORIES: Batteries (installed), hard carrying case, user manual, USB cable and PC software

RLD-1

RLD-1 Refrigerant Leak Detector

Troubleshoot air conditioning systems quickly and accurately with the RLD-1. State-of-the-art technology makes it easy to precisely pinpoint a wide variety of halogenated refrigerant leaks.

- **Detects R-134a, R-404a, R-407c, R-410a, R-22, Freon and other refrigerants**
- **Sensitive gas sensor and advanced digital signal processing for high accuracy**
- **Built-in suction pump for precise sensor response**
- **Tri-color LED display and audio clearly indicate leaks**
- **High-Medium-Low (H/M/L) leak sensitivity selector**
- **Automatic zero and background compensation**
- **Low battery indication**
- **Ambient concentration reset**

FEATURE	RLD-1
Detectable Gases	R-134a, R-404a, R-407c, R-410a, R-22, Freon
R-22, 134a Sensitivity	H - 3g/year, M - 15g/year, L - 30g/year
R-404a, 407c, 410a Sensitivity	H - 4g/year, M - 20g/year, L - 40g/year
Alarm Method	Buzzer, Tricolor LED bar Indicator
Power Usage	2 C size (3V DC) Alkaline Batteries
Snake Tube Length	15.5" (40 cm)

INCLUDED ACCESSORIES: Batteries (installed), user manual, carrying case, leak check bottle, AC adapter

Recommended Accessories

RLD-1 SENSOR **Replacement Sensor** (Replacement part)

★★★★★
TOP RATED

"Best tool for the job!"

In over 25 years of business, I've seen units with suspected refrigerant leaks but were too small to find. With the Amprobe RLD-1 refrigerant leak detector I can take the guess work out of finding and repairing a refrigerant leak. I recommend that if you are in the HVAC business this is a must have for every tool bag!"

- RLD-1 Customer reviews

GSD600 Gas Leak Detector

Detect dangerous methane or propane leaks that can lead to explosions and gas poisoning. With its five-level LED and audible alarms, the GSD600 helps you assess whether the area is safe or needs to be vented. The frequency of the beeping increases with the concentration of the gas, allowing you to pinpoint the source of the leak in piping or appliances. The display provides an accurate measurement of the presence of gas in the area.

- **Detects combustible gases**
- **Quickly identifies and pinpoints gas leaks for closed piping systems**
- **Automatic calibration feature level LED alarm: >40, >80, >160, >320, and >640 ppm**
- **Mute function and LED alerts for quiet areas**
- **Built-in earphone jack (earphones not included) for loud environments**
- **Flexible probe to access difficult measurement areas**
- **Auto power-off**

FEATURE	RANGE
Methane	40 ppm ➞ 640 ppm
Propane	35 ppm ➞ 580 ppm
Sensitivity	35 ppm (propane)

INCLUDED ACCESSORIES: Battery (installed), carrying case, user manual

★★★★★
TOP RATED
"Accurate, affordable, and easy to use."
"This is one of the most economical tools I have used. Simple, yet accurate in use and detection."

- GSD600 customer reviews

GSD600

Ultrasonic Leak Detectors

When leaks occur in pressurized systems, they emit an ultrasonic frequency humans can't hear. These ultrasonic leak detectors convert the sounds into an audible range for fast, easy leak detection.

ULD-300 Ultrasonic Leak Detector

Quickly locate gas leaks in pressurized air lines, steam lines, and refrigeration systems regardless of gas type (CFC, HFC, nitrogen and other non-combustible gases).

- **Locates arcing in an electrical system**
- **Finds the ends of buried PVC pipes**
- **Parabola shield reduces background noise**
- **Access difficult or dangerous areas with extension tube**

INCLUDED ACCESSORIES: Flexible tubing adapter, tubular extension, carrying case, power parabola, headphone, batteries (installed)

ULD-300 **TMULD-300**

TMULD-300 Ultrasonic Leak Detector with Ultrasonic Transmitter

When leaking gases are not sufficiently pressurized, use the TMULD-300. It includes an ultrasonic transmitter that creates sound waves so you can check door or trunk seals for air tightness, or windshields for water tightness.

- **Same features as ULD-300**
- **Transmitter "pressurizes" an area with ultrasonic sound**

INCLUDED ACCESSORIES: Flexible tubing adapter, tubular extension, carrying case, power parabola, headphone, batteries (installed), UT-300 transmitter

ULD-300

★★★★★
TOP RATED
"Great product."
"This tool paid for itself many times over. I have found leaks large and small inside walls, on evaporator coils, condensers and water lines. I've loaned it to colleagues who purchased your product immediately after using mine. These tools lead the industry in leak detection through its sensitivity and ability to detect negative or positive pressure."

- TMULD-300, customer reviews

Recommended Accessories

UT-300 **Ultrasonic Transmitter (ULD-300)**
(Replacement part)

ULD-300-KIT1
Adapter Kit For ULD-300:
TEA-1 Flexible tubing adapter
PB-1 power parabola
HP-1 headphone
TE-1 tubular extension
(Replacement part)

CM-100

CM-100 Carbon Monoxide Meter

This compact meter measures the presence of carbon monoxide and warns you when it exceeds safe levels.

- **Alarm is preset to 25 ppm to warn about possible danger**
- **Adjustable CO warning levels: 25, 30, 35, 45, 50, 70, 100 and 200 ppm**
- **Backlight for viewing in dim areas**
- **Auto power-off to save batteries**
- **Self-test feature**
- **Dual digital backlit display**

FEATURE	CM-100
Range	0 ppm → 999 ppm
Resolution	1 ppm

INCLUDED ACCESSORIES: User manual, batteries (installed)

CO2-100

CO2-100 Handheld Carbon Monoxide Meter

Get instant feedback on carbon monoxide levels up to 9,999 ppm, while you check the air quality compliance of hospitals, schools, offices, or production floors.

- **Large, easy-to-read triple LCD display of CO2, temperature and relative humidity**
- **Selectable display of dew point and wet bulb**
- **High performance low-drift sensor designed with NDIR (Non-Dispersive Infrared) waveguide technology**
- **Backlight for working in dim areas**
- **TWA (time-weighted average) display for an 8-hour period**
- **15 minutes STEL (short-term exposure limit) value**
- **Audible alarm threshold setting by carbon dioxide level**
- **Data hold, min/max, average functions**
- **Long term drift compensation for accurate readings**

FEATURE	CO2-100	CO2-200
C02	0 → 9999 ppm	0 → 9999 ppm
Temperature Range	14°F → 140°F (-10°C → 60°C)	14°F → 140°F (-10°C → 60°C)
RH Range	0% → 95%	0% → 95%
DP (Dew Point Temp.)	-4°F → 139.8°F (-20°C → 59.9°C)	-4°F → 139.8°F (-20°C → 59.9°C)
WB (Wet Bulb Temp.)	24.8°F → 139.8°F (-5.0°C → 59.9°C)	23°F → 139.8°F (-5.0°C → 59.9°C)
Resolution	1 ppm - CO_2 concentration, 0.1°C / °F - Temp, 0.1%RH - Humidity	1 ppm - CO_2 concentration, 0.1°C / °F - Temp, 0.1%RH - Humidity

INCLUDED ACCESSORIES: Batteries (installed), user manual, carrying case

★★★★★
TOP RATED

"Consistent calibration and fast updating."

"I use this tool to check environmental CO_2 conditions in theaters and in the field. The range is good with humidity readings that went to 3% in Colorado sub-alpine desert and CO_2 readings that topped the 9,999 ppm limit in productions."

- CO2-100 customer reviews

CO2-100

CO2-200

CO2-200

CO2-200 Wall-Mounted Carbon Monoxide Meter

Monitor critical, environmentally controlled areas such as laboratories and production facilities with this permanently mounted air quality meter.

- **CO2 measurements up to 9,999 ppm, temperature, relative humidity, dew point and wet bulb**
- **Audible alarm threshold setting for carbon dioxide levels with output drive relay to control air flow system**
- **High performance low drift sensor designed with NDIR (Non-Dispersive Infrared) wave guide technology with automatic back ground calibration**
- **Recording of min, max and average values with recall function**
- **Data hold**

INCLUDED ACCESSORIES: Batteries (installed), carrying case, power adapter 110-240 V AC, user manual

TACH-10 and TACH20 Combo Tachometers

Measure rotational speed of motors, conveyor belts and other moving or rotating systems with these handheld tachometers. The TACH20, our top-of-the-line tachometer includes six adapters, a surface speed wheel for contact RPM measurement and an infrared beam for non-contact measurements. The TACH-10 is an economical, universal tachometer that measures rotational and surface speed using both contact and non-contact methods.

- **Built-in memory function automatically stores maximum, minimum and average values as well as the last measurement displayed**
- **Easy to select units and mode functions**
- **Select RPM using infrared beam or adapter: m/min, m/sec, ft/min, ft/sec, in/min, m, ft and in**
- **Auto power-off function**

FEATURE	TACH-10	TACH20
Rotation (Non-Contact)	10.0 rpm → 99999 rpm	1 min → 99999 min
Rotation (Contact)	10.0 rpm → 19999 rpm	1 min → 19999 min
Surface Speed (Contact)	1.0000 → 9999.9 m/min 3.0000 → 30000 ft/min 1.0 → 10000 yd/min	0.10 → 1999 m/min 0.40 → 6550 ft/min 4.00 → 78700 in/min 0.10 → 33.30 m/sec 0.10 → 109 ft/sec

INCLUDED ACCESSORIES: Batteries (installed), user manual, reflective tape, carrying case, adapters

TACH-10 TACH20

Recommended Accessories

TACH-20-KIT1	**Tip, Wheel, Shaft, Funnel and Reflective Tape** (TACH20 Replacement part)
TACH-20-ADPT	**Adaptor For TACH20** (Replacement part)
TACH-10-KIT1	**Convex / Concave Tip, Reflective Tape** (TACH-10 Replacement part)

LM-100 and LM-120 Light Meters

These portable, easy-to-use digital light meters measure interior illumination levels from fluorescent, metal halide, high-pressure sodium or incandescent sources. Switch off, reduce or increase the output level of lighting fixtures. Reduce the energy burden of the building by significantly increasing the efficiency of its lighting system.

- **Measure in lux or footcandles, front panel switchable**
- **Simple, one-handed operation**
- **Silicon photodiode sensor and filter for accuracy and high-resolution**
- **Analog DC voltage output to operate with chart recorder or data logger (LM-120 only)**
- **Zero adjustment (LM-120 only)**
- **Auto power-off to save battery life**

FEATURES	LM-100	LM-120
Ranging	Manual	Automatic / Manual
Illumination Sensor	Silicon photodiode and filter	
Range Lux	20, 200, 2000, 20000, 200000	
Range Footcandles	20, 200, 2000, 20000	
Calibration Point	2854 °K Cosine Angular corrected per JIS C 1609:1993 and CNS 5119 general A class	
Data	Data hold	Data hold, min/max

INCLUDED ACCESSORIES: Batteries (installed), carrying case, user manual

LM-100

★★★★★

TOP RATED

"Excellent meter for lighting uses."

"I've found this meter's accuracy is as advertised at +/- 3%, its consistency under flickering AC driven LEDs (120Hz) is actually better than higher end meters that are unable to compute the samples accurately. Overall, an impressive meter at a great price, that I use for rough photometric tests as well as general illumination measurements."

- LM-200LED customer reviews

LM-200LED Light Meter

This professional tester accurately measures light output of LED sources for all visible light ranges.

- **Lux or footcandle measurement units, user selectable**
- **Data hold**
- **Max recording captures highest light measurement**
- **Measuring lights source include all visible ranges**
- **Accurate measurements with spectral response close to CIE luminous spectral efficiency**
- **Angled light cosine correction**
- **Extendable wire (approximately 5' (1.5 m)**
- **Measurements according to JISC1609:1993 and CNS 5119 general A class specifications**

FEATURE	LM-200LED	BEST ACCURACY
LED Light Measurement	200, 2000, 20000, 200000 lux	+/- 3% (Calibrated to standard incandescent lamp 2856° K) and corrected LED day white-light spectrum.
	20, 200, 2000, 20000 footcandle	

INCLUDED ACCESSORIES: User manual, battery (installed), carrying case

LM-200LED

SM-10 and SM-20-A Sound Meters

These sound meters meet the measurement needs of safety engineers, health, industrial and safety offices as well as quality control. Use them to check compliance with safety regulations and perform acoustic analysis. They use two different weighting filters required by the IEC 651 and ANSI S1.4 Type 2 for audio filtering.

- **A-weighting for general noise sound level**
- **C-weighting for measuring sound level of acoustic material control in various environments**
- **Display with 0.1dB steps on a 4-digit LCD**
- **Slow (1 sec) and fast (125ms) response settings to check peak and average noise levels**
- **PC interfaces (SM-20-A only)**

SM-20-A

FEATURES	SM-10	SM-20-A
Microphone	1/2" Electret condenser microphone	
Standard Applied	IEC 651 Type 2, ANSI S1.4 Type 2	
Dynamic Range	50 dB	
Time Weighting	FAST (125 mS), SLOW (1 sec)	
Frequency Range	31.5 Hz ➞ 8 kHz	
Measuring Level Range (Auto Range)	A-Weighting: 30 dB ➞ 130 dB C-Weighting: 35 dB ➞ 130 dB	
Data	Data hold	Min/max
Internal Memory	–	14000 records

INCLUDED ACCESSORIES: Carrying case, user manual, battery (installed), USB cable download and software CD (SM-20-A only)

★★★★★
TOP RATED

"I work in a manufacturing plant and regularly check sound levels to make sure we are using the right hearing protection. We have been using the Amprobe SM-20-A Sound Meter for its ease of use and simple operations, and quick and easy testing. Love it and recommend it to everyone."

- SM-20-A customer review

SM-CAL1

SM-CAL1 Sound Meter Calibrator

This instrument generates the fixed sound level signals needed to calibrate sound level meters.

- **Two output levels: 94 dB and 114 dB**
- **Output frequency: 1000Hz**
- **Fits 0.5" microphones**
- **Easy one-handed operation**
- **Low battery indicator**
- **CE: conforms to ANSI S1.40 – 1984 and IEC942 – 1988 Class 2**

INCLUDED ACCESSORIES: Battery (installed), user manual

Solar Energy and Battery Testers

Amprobe solar solutions provide you with the tools to knowledgeably install, maintain, and troubleshoot solar systems as well as analyze the energy efficiency of solar panels, water heaters, and windows. Use Amprobe battery testers not only for green energy applications, but testing UPS and battery back-up systems.

NEW 2015

Solar-100

SOLAR-100 Power Meter

Optimize the placement of solar systems and analyze window efficiency with the SOLAR-100. Measure solar output and calculate overall energy and efficiency.

- **Windows performance testing: calculate and verify heating or heat reduction caused by direct sunlight**
- **Research the location of solar panels or solar water heaters**
- **Measures solar power and transmission**
- **Power mode measures incident solar radiation**
- **Transmission mode calculates the percentage of solar power transmission through materials such as windows**
- **Convenient display with remote sensor technology**
- **Selectable measurement units (W/m2 or BTU/ft2xh)**
- **Min/max function identifies locations with maximum or minimum power**
- **Also useful for physics and optical laboratories, meteorology, agriculture**

FEATURE	SOLAR-100
Solar Power	Up to 2000 W/m², 634 BTU/(ft2xh)
Max/Min	•
Data Hold	•

INCLUDED ACCESSORIES: Battery (installed), carrying case, user manual

★★★★★
TOP RATED

"A great instrument."

"This is an excellent device for quick measurements of irradiance out in the field. I was surprised that it can measure BTUs as well as headlight brightness and window tint.

It can also demonstrate the advantages of tracking and the effects of cloud cover. Great value for the money."

- SOLAR-100 customer reviews

SOLAR-600

SOLAR-600 Solar Analyzer

Install, maintain, troubleshoot and evaluate the efficiency of solar panels with this these professional analyzers. The SOLAR-600 also offers real-time data logging and PC downloads for further analysis.

- **Determine the proper inverter size and optimum power output position of panels**
- **Identify broken or worn-out cells**
- **I-V curve test with cursor for solar cells**
- **Maximum solar power (Pmax) search by auto-scan**
- **Maximum voltage (Vmaxp) at Pmax**
- **Maximum current (Imaxp) at Pmax**
- **Voltage at open circuit (Vopen)**
- **Current at short circuit (Ishort)**
- **I-V curve with cursor**
- **Calculation of panel efficiency (%)**
- **Manual single point test**
- **Real time datalogging and PC download**

FEATURE	SOLAR-600
DC Voltage:	0.000 V → 9.999 V, 10.00 V → 60.00 V
DC Current:	0.01A → 9.99 A, 10.0 A → 12.0 A
DC Current Simulation	0.01 A → 9.99 A, 10 A → 12 A
Power	0 W → 720 W
Efficiency	•
Scan delay	0 mS → 3000 mS
Alarm	•
Solar Panel Area	0.001 m2 → 9999 m2
Standard Light Source	10 W/m2 → 1000 W/m2
Data Storage Memory	99 records
Data Logging	•

INCLUDED ACCESSORIES: User manual, rechargeable battery pack (installed), AC adapter, USB cable and software CD, test leads, carrying case

Recommended Accessories

SOLAR-BAT1 **Rechargeable Lithium Battery SOLAR-600** (Replacement accessory)

BAT-250 Battery Tester

The Amprobe BAT-250 Battery Tester is designed for one-handed, comfortable and reliable battery measurements. The uniquely designed tester offers an ergonomic slider and a v-shaped side cradle to better hold batteries in place during testing. The contoured case shape fits neatly in your hand. Testing your batteries has never been easier.

- **Quickly indicates if batteries are "good", "low" or "replace"**
- **Test standard and rechargeable batteries: 9V, AAA, AA, C, D, and 1.5 V button/coin/watch**
- **Ergonomically designed to contour to your hand for easy operation**
- **No batteries required to operate**
- **Large, upright display is easy to read**
- **V-shaped side cradle holds batteries securely in place during testing for consistently accurate results**
- **High-quality 9V contacts make tests simple and error-free**
- **Slider is shaped for one-handed testing**

	BAT-250 Battery Tester
I Max at F.S.D (typical)	**1.5 V:** 375 mA, **9 V:** 40 mA
Normal load (typical)	**1.5 V:** 4 Ω, **9 V:** 215 Ω
Dimensions (H x W x D)	4.3 x 2.9 x 1.1 in (110 x 74 x 29 mm)
Battery size	9 V, AAA, AA, C, D and 1.5 V button/coin/watch battery
Weight	Approximately 0.11 lb (50 g)
Certification	CE

Battery Type:	Battery Indicator (typical):		
	REPLACE	LOW	GOOD
AAA, AA, C, D and 1.5 V button/coin/watch battery	< 0.9 V	0.9 V	> 1.0 V
9 V	< 5.3 V	5.3 V	> 6.5 V

INCLUDED ACCESSORIES: User manual

BAT-250

Slider for testing AAA, AA, C, D, and 1.5 V button/coin/watch batteries.

Upright display is easy to read.

Side cradle holds standard battery sizes.

BAT-250

Tests 9V batteries

BAT-250

BAT-500 Battery Tester

Here's the quick, accurate way to test back-up batteries and UPS systems without taking batteries off line.

- **Comparator function to quickly access battery condition as Pass, Warning or Fail**
- **Store up to 99 user programmable settings for quick battery diagnostics**
- **Test battery impedance to calculate its true life**
- **Works with most batteries: compact storage batteries, alkaline and lead-acid up to 500 Ah**
- **Resistance measurement up to 40 ohms and voltage up to 40 V**
- **Simultaneously measure battery resistance and voltage**
- **Compact and lightweight**
- **For trending/life cycle analysis download test results to a PC**

FEATURE	BAT-500
Maximum Battery Capacity	Up to 500 amp hours
Battery Type	Alkaline, Nickel-Metal Hydride (NiMH), Nickel-Cadmium (NiCd), Lithium-ion (Li-ion) and lead-acid batteries
DC Voltage	4.000 V, 40.00 V
Impedance	40 mΩ, 400 mΩ, 4 Ω, 40 Ω
Data Capture Memory	500 data sets
Data Logging Memory	9600 data sets
PC Download	•

INCLUDED ACCESSORIES: User manual, software manual, batteries, AC adaptor, RS232C (to USB Bridge) cable, software CD, kelvin clips

BAT-500

CR50A

LCR55A

★★★★★
TOP RATED

"Very reliable."

"We work in the HVAC industry and capacitors are a common issue. The Amprobe LCR55A Capacitance Tester has been a great investment and time saver. A quick check and record has identified weak capacitors and saved us from costly call backs."

- LCR55A customer reviews

CR50A Capacitance Tester

Inspect and verify components for quality control by quickly checking circuits with this full-range capacitance and resistance meter.

- **Dual zero adjustments pots to null strays and test leads**
- **Special "low ohms" range**
- **"Zero adjust" pots for low ohms and capacitance ranges**
- **Low battery indication**

LCR55A Inductance, Capacitance and Resistance Tester

The ultimate electronic component verifier measures inductance, capacitance, resistance, transistors, diodes and microwave diodes.

- **Plug-in test slots and test leads with threaded alligator clips for precision testing**
- **Data hold and max hold**
- **"Zero adjust" pot for ohms**
- **Low battery indication**
- **Auto power-off**

FEATURE	CR50A	LCR55A
Resistance	20 Ω, 200 Ω, 2 kΩ, 20 kΩ, 200 kΩ, 2 MΩ, 20 MΩ	20 Ω, 200 Ω, 2 kΩ, 20 kΩ, 2 MΩ, 20 MΩ
Capacitance	200 pF, 2000 pF, 2 µF, 20 µF, 200 µF, 2 mF, 20 mF	200 pF, 2000 pF, 2 µF, 20 µF, 200 µF, 2 mF
Inductance	-	200 µH, 2 mH, 200 mH, 200 H
Transistors	-	Hfe, Iceo (NPN, PNP)
Diodes	•	Standard (3 V) & microwave oven (8 V)
Continuity Test	•	•

INCLUDED ACCESSORIES: User manual, test leads with alligator clips, battery (installed)

R-115S

RC-120S

R-115S Remcon Momentary Switch Relay (3-wire)
RC-120S Remcon Closet Light Relay (2-wire)

When you need low-voltage control circuits for safe operation in industrial and process control environments, choose these low-voltage relays with built-in transformers. Each unit operates independently, so you can install one relay and operate it with as many switches as needed or control multiple relays with a single switch.

- **Uses light 22 gauge wire, saving the time and expense of pulling Romex or armored cable**
- **Simplifies wiring – no need to wire back to separate low voltage transformers**
- **Operates silently so you can install relays at the fixture instead of at a remote location**

FEATURE	R-115S	RC-120S
AC Voltage	105 V → 125 V	
AC Current	Up to 6.5 A (1/4 HP max motor load at 120 V)	
Frequency	60 Hz	
Safe Control Switching, Maximum	10 V DC 10 milliamps	

Accessories

Get the most out of your Amprobe tools with a wide range of carrying cases, probes, current transducers, test leads, software and more. Visit **www.Amprobe.com** to view the full line of accessories and determine which ones are available for your Amprobe test tools.

Test Leads

DL243D

DL243D
48" long silicone lead wires, probe tips, alligator clips, spade lugs, fold-out carrying case

DL248D

DL248D
Same as DL243D plus spring loaded crimp tips and red tip length extender

TL35B

TL35B
Standard leads: 40" PVC insulated lead with standard tips plus threaded large alligator clips, CE approved alligator clips, 0.6" jaw, shrouded 90° banana plugs, one red and one black leads and clips

TL1500

TL1500
Heavy duty test leads
CAT IV / 1000 V, 1500 V MAX

HS-1

HS-1 Hanging Strap
The HS-1 Hanging Strap is a three-way hanger for the AT-7000-T Transmitter or any Amprobe digital multimeter. It allows convenient hanging of the unit, placement on a belt or as a stand.

Line Splitter

ELS2A

ELS2A, AC Line Splitter
- Measures load current without splitting line cord
- Two measurement points, X1 and X10 for increased sensitivity
- Built-in voltage measurement jacks
- 115 V, 15 A

Current Clamps

CT235A

CT237A

CT238A

CT235A AC/DC current clamp,1000 A (50/10 kHz), mV output, 1.2" max conductor
CT237B AC/DC current clamp, 200 A (50/10 kHz), mV output, .75" max conductor
CT238A AC/DC current clamp, 20 A (50/20 kHz) Low current version

Thermocouple

TPK-59

TPK-59, Thermocouple
- Accessory for multimeters and clamp-ons with temperature input
- Measures temperature from -50°F → 600°F
- Plugs directly to a meter without additional adapters

Carrying Case Directory

	CC-ACDC	DC205C	CC-MEG	SV-U	VC221B	VC3A	VC30A	CC-DM-III	CC-300 PRO	CC-7000
30XR-A					•					
33XR-A					•					
34XR-A					•					
37XR-A					•					
38XR-A					•					
5XP-A					•					
15XP-B					•					
35XP-A					•					
AC40C							•			
AC50A							•			
AC68C	•									
AC75B	•									
ACD-50NAV	•									
ACD-51NAV	•									
ACDC-52NAV	•									
ACD-53NAV	•									
ACDC-54NAV	•									
ACD-20SW	•									
ACD-21SW	•									
ACD-22SW	•									
ACD-23SW	•									
ACD-10 PLUS				•						
ACD-10 TRMS-PLUS				•						
ACD-14 PLUS				•						
ACD-14 TRMS-PLUS				•						
ACD-15 TRMS-PRO	•									
ACD-16 TRMS-PRO	•									
ACD-41PQ	•									
ACD-45PQ				•						
ACD-6 PRO	•									
ACDC-100	•									
ACDC-100 TRMS	•									
ACD-3300 IND	•									
ACDC-3400 IND	•									
ACDC-400				•						
AD40B							•			
AM-140-A					•					
AM-160-A					•					
AM-220					•					
AM-240					•					
AM-250					•					
AM-270					•					
AM-500							•			
AM-510					•					
AM-520					•					
AM-530					•					
AM-560					•					
AM-570					•					
AM8C					•					
CR50A							•			
DGC-1000A	•									
DM73C				•						
DM78C							•			
DM7C					•					
DM9C					•					
HD110C		•			•					
HD160C		•			•					
INSP-3					•					
LCR55A					•					
LH41A				•						
PM51A						•				
PM55A						•				
RS-1007	•									
RS-3 PRO	•									
TIC 300 PRO									•	
GP-2A			•							
DM III Multitest								•		
AMB-45			•							
AT-7020 / 7030										•

CC-ACDC
Soft Pouch Zippered Carrying Case
11.5 x 4.5 x 2.8"
(292 x 114 x 70 mm)

DC205C
Deluxe Heavy Duty Carrying Case
9.6 x 4.7 x 4.3"
(244 x 119 x 109 mm)

CC-MEG
Soft Carrying Case
10 x 8.5 x 3.25"
(254 x 216 x 89 mm)

SV-U
Soft Pouch Zippered Carrying Case
8.5 x 3.0 x 2.5"
(216 x 76 x 64 mm)

VC221B
Padded Vinyl Carrying Case
8.5 x 4.5 x 2.5"
(216 x 114 x 64 mm)

VC3A
Rugged zippered Carrying Case
4.5 x 2.2 x .4"
(114 x 56 x 10mm)

VC30A
Vinyl Carrying Case
7.5 x 3.4 x 1.5"
(191 x 86 x 38 mm)

CC-DM-III
Deluxe Heavy Duty Carrying Case
18.3 x 15.0 x 7.3"
(465 x 381 x 184 mm)

CC-300 PRO
Leather Carrying Case
10.84 x 4.20 x 2.40"
(275 x 107 x 70 mm)

CC-7000
Custom Hard Carrying Case
16 x 13 x 7 in
(40.6 x 33 x 17.8 cm)

Product Fuse Directory

MODEL	PART NUMBER	FUSE TYPE
RS-1007	FP500	0.5A/1000V, 6.3X32mm
RS-3 PRO	FP500	0.5A/1000V, 6.3X32mm
AM-250	FP650	630mA/500V, 6X32mm
	FA-12.5A/500V	12.5A/500V, 6X32mm
AM-270	FP160	10A/600V, 10X38mm
	FUSE-1A	1A/600V, 10X38mm
AM-500	FA-0.5A/700V	0.5A/700V, 6.3X32mm
	FP400	10A/600V, 6.3X25 mm
AM-510	FP500	0.5A/1000V, 6.3X32mm
	FP400	10A/600V, 6.3X25 mm
AM-520	FP500	0.5A/1000V, 6.3X32mm
	FP410	11A/1000V, 10X38mm
AM-530	FP500	0.5A/1000V, 6.3X32mm
	FP410	11A/1000V, 10X38mm
AM-560	FP500	0.5A/1000V, 6.3X32mm
	FP410	11A/1000V, 10X38mm
AM-570	FP500	0.5A/1000V, 6.3X32mm
	FP410	11A/1000V, 10X38mm
AM-140-A	FP160	10A/600V, 10X38mm
	FUSE-1A	1A/600V, 10X38mm
AM-160-A	FP412	0.44A/1000V, 10X38mm
	FP410	11A/1000V, 10X38mm
AM-220	5X20-250.5	0.5A/250V, 5X20mm
	6X32-250V10A	10A/250V, 6X32mm
AM-240	5X20-250.5	0.5A/250V, 5X20mm
	6X32-250V10A	10A/250V, 6X32mm
30XR-A	FP160	10A/600V, 10X38mm
	FP375	0.25A/700V, 6.3X32mm
33XR-A	FP100	10A/1000V, 10X3 8mm
	FP300	0.315A/1000V, 6.3X32mm
34XR-A	FP100	10A/1000V, 10X38mm
	FP300	0.315A/1000V, 6.3X32mm
37XR-A	FP100	10A/1000V, 10X38mm
	FP500	0.5A/1000V, 6.3X32mm
38XR-A	FP100	10A/1000V, 10X38mm
	FP500	0.5A/1000V, 6.3X32mm
5XP-A	FP300	0.315A/1000V, 6.3X32mm
15XP-B	FP200	2A/1000V, 6.3X32mm
35XP-A	FP200	2A/1000V, 6.3X32mm
HD110C	FP700	2A/1500V, 8X65mm
HD160C	FP700	2A/1500V, 8X65mm
DM7C	FP900	200mA / 700V, 6.3X32mm
DM9C	FA-6X32/.63	0.63A/500V, 6X32mm
	FP540	10A/600V, 6.3X32 mm
PRM-4	FP900	200mA/700V, 6.3X32mm
AMB-45	FA-0.5A/700V	0.5A/700V, 6.3X32mm
S2600	380.25-6X32	0.25A/380V, 6X32mm
T-100,T-300 (CT-100, 326B)	3AG-312.250	0.25A/250V, 6.3X32mm
T2200 (AT-200X)	2502-6X32	2A/250V, 6X32mm
T-4000 (AT-400X)	FA6X46MM	0.25A/1000V, 6X46mm
X1000 (AT1000)	380.25-6X32	0.25A/380V, 6X32mm
CR50A	FP125	0.1A/250V, 5X20mm
LCR55A	FP125	0.1A/250V, 5X20mm
AU92	FP520	0.5V/500V, 6.3X32 mm
	FP540	10A/600V, 6.3X32 mm

Software and Cables

Transfer measurement data to your computer with these kits.

For complete details on Amprobe software and to download the latest versions, please visit **(www.amprobe.com/softwaredownloads.html)**

Download Suite Software

Download Suite is a free software package compatible with most of the Amprobe instruments with download capabilities. Enjoy the benefits of this powerful software package for a wide selection of Amprobe megohmeters, ground resistance testers, multitesters, and power quality recorders.

- Install software once and use it with all supported Amprobe products
- All instruments share the same file format. You can open files recorded by you, other people, or the Amprobe instruments right on your PC.
- Download Suite automatically checks your version for upgrades and keeps your version current.
- Windows7 compatible

USB-KIT2

- Download software with connection cable for Amprobe clamp meters

USB-KIT3

- Download software with connection cable for Amprobe multimeters

RS-USB, USB to RS-232 Adapter

- Converts the USB port of a PC to RS-232
- Supports Windows 95 (OSR2X), 98, 2000, ME, XP, Vista, Mac 8.6 and higher
- Works with Amprobe instruments with download capabilities
- Works with many other products with USB ports, including cameras, Palm Pilot, card readers, mouse, security systems, etc.
- Frees up the serial port for other uses

TM-SWA, USB Cable and Software

- Allows for real-time data downloads from TMA10A and TMD90A
- Records two channels simultaneously

USB-KIT2

TM-SWA

USB-KIT3

MODEL #	PRODUCT #	PG #
15XP-B	3534088	*
30XR-A	2727774	*
33XR-A	2727788	*
34XR-A	2727795	*
35XP-A	2727849	*
37XR-A	2727808	14
38XR-A	2727824	14
5XP-A	2727851	*
AC50A	3033017	10
AC68C	2727919	*
AC75B	2727885	*
ACD-10 PLUS	3037808	8
ACD-10 TRMS-PLUS	3037813	*
ACD-14 PLUS	3086905	8
ACD-14 TRMS-PLUS	3086910	8
ACD-15 TRMS-PRO	2730690	*
ACD-16 TRMS-PRO	2730713	*
ACD-20SW	3472723	8
ACD-21SW	3472738	*
ACD-22SW	3804934	*
ACD-23SW	3804934	8
ACD-3300 IND	3434877	*
ACD-41PQ	2730760	*
ACD-45PQ	3730013	*
ACD-50NAV	3729945	6
ACD-51NAV	3729950	6
ACD-53NAV	3729977	*
ACD-6 PRO	2730785	10
ACDC-100	2740452	*
ACDC-100 TRMS	2740465	*
ACDC-3400 IND	3434889	9
ACDC-400	2730810	*
ACDC-52NAV	3729961	6
ACDC-54NAV	3729989	6
ACF-3000DM-A	2732395	*
AM-140-A	3730024	*
AM-160-A	3730036	*
AM-250	3524986	*
AM-270	3524999	*
AM-500	4018624	16
AM-510	4018636	13
AM-520	4018649	*
AM-530	4018651	13
AM-560	4210333	*
AM-570	4210340	13
AMB-110	3730335	33
AMB-2	2730984	*
AMB-25	2730991	32
AMB-3	2731008	34
AMB-45	2731024	32
AMB-50	3730288	33
AMB-55	3730320	33
AMC-2	2731060	34
AMC-3	2731072	34
AMC-4	2731085	34
AMP-25	4588254	7
AMP-210	4560537	5
AMP-220	4560543	5
AMP-310	4560555	5
AMP-320	4560562	5
AMP-330	4560570	5

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AT-1000	2731097	28
AT-2004-A	4416090	28
AT-2005-A	4416104	28
AT-3500	3435058	26
AT-4001-A	4416052	27
AT-4003-A	4416065	*
AT-4004-A	4416076	27
AT-4005-A	4416083	27
AT-7020	4313854	24
AT-7030	4313868	24
BAT-200	3473003	*
BAT-250	3473003	53
BAT-500	3474946	53
BT-120	3472789	*
BT-250	2731177	29
CM100	3311826	48
CO2-100	3475094	48
CO2-200	3475100	48
CR50A	3026965	54
CT-100	2731189	29
CT-326-C	4416119	29
CT235A	3026809	56
CT237B	3511514	56
CT238A	3026827	56
DGC-1000A	2731217	35
DL243D	3026853	56
DL248D	3026866	56
DM-III MULTITEST	2731242	*
DM-III MULTITEST F	2731256	36
DM73C	2727739	16
DM78C	3156830	*
ECB50A	3016966	*
ELS2A	3027072	10/56
GP-2A	4129187	35
GSD600	3311832	47
HD110C	2670779	15
HD160C	2670787	15
HS-1	4544565	56
INSP-3	3503207	18
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IR608A	3015690	39
IR-710	4109553	38
IR-712	4109566	*
IR-720	4109575	38
IR-730	4109582	38
IR-750	4109594	38
LAN-1	3052401	22
LCR55A	3026976	54
LH41A	3030898	10
LM-100	3052348	49
LM-120	3052353	49
LM-200LED	3730217	49
LT-10	4222120	18
MAN15	3474993	*
MAN30	3475009	*
MANO2-A	3477279	*
MO-100	3474954	20
MT-10	3503178	44
MTL-90B	2733170	*
PK-110	0000000	22
PM51A	2727700	16

MODEL #	PRODUCT #	PG #
PM55A	2727721	16
PRM-4	3239635	20
PY-1A	3503229	22
R-115S	2734454	54
RC-120S	2731504	54
RLD-1	3474968	46
RS-1007 PRO	3467476	9
RS-3 PRO	3467465	*
SM-10	3052366	50
SM-20-A	3477333	50
SM-CAL1	3052382	50
SOLAR-100	3474979	52
SOLAR-600	3730242	52
ST-101B	3016975	21
ST-102B	4160817	21
TACH-10	3730008	49
TACH20	3311961	49
TH-1	3311871	40
TH-3	3027060	40
THWD-3	3033042	40
THWD-5	3311803	40
TIC 300 PRO	3467441	19
TIC 410A	3107749	19
TL1500	2696277	56
TL245A	3068215	*
TL35B	3068232	56
TL36A	3034444	*
TMA-21HW	3730239	46
TMA10A	2817785	45
TMA40-A	3477287	45
TMA5	3503169	44
TMD-50	3730150	*
TMD-53	3730085	*
TMD-56	3730138	41
TMD-10	3052394	*
TMD90A	2817797	*
TMULD-300	2731543	47
TPK-59	2733660	56
TR200-A	3477302	42
TR300	3311844	42
TX900	3390352	*
ULD-300	2734431	47
VP-1000SB	4160821	21
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*This product is available for order but not in the catalog. For detailed specifications go to **www.Amprobe.com**

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2015

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2015 Product Catalog

Volume 1

What's new for 2015

AT-7000 Advanced Wire Tracer

Get accurate results in minutes with new features and technologies that simplify wire tracing and breaker identification. Quickly and easily determine the precise direction and location of energized wires in walls, floors and ceilings with the patented Smart Sensor™.

AMP-200 and AMP-300 Series TRMS Clamp Meters

A complete range of measurement functions for modern electrical environments, motor testing and HVAC applications. All models feature True-RMS sensing, low pass filters and fast response processors for quick, error-free measurements.

AMP-25 AC/DC TRMS Mini-Clamp

AMP-25 Mini-Clamp is pocket-sized, enabling quick, easy spot checks of electrical systems and designed to measure AC/DC load current and inrush current for motors.

BAT-250 Battery Tester

The uniquely designed tester offers an ergonomic slider and a v-shaped side cradle to better hold batteries in place during testing and a contoured case shape that fits neatly in your hand.

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